

**CONTEMPORARY MIDDLE-CLASS DWELLINGS  
IN DUBAI: AN ASSESSMENT OF HOUSING SPACE  
OVER-CONSUMPTION AND ITS POLICY  
IMPLICATIONS**

**SALEM ALSHAFIEI**

**A Thesis Submitted to the Faculty of Humanities, Arts and Social Sciences  
in Candidacy for the Degree of Doctor of Philosophy**

NEWCASTLE UNIVERSITY LIBRARY

-----

205 36733 X

-----

Thesis L84b3

**School of Architecture, Planning & Landscape  
University of Newcastle upon Tyne, UK.  
March 2007**

---

## **DEDICATION**

---

I would like to dedicate this work to my beloved wife Dr. Fawzia who did not spare any effort to inspire me throughout the course of its preparation.



---

## ABSTRACT

---

Before the discovery and exploitation of oil in the international markets during the late 1960s, the United Arab Emirates (UAE) was considered as one of the most deprived regions of the world. However, since then the country has enjoyed remarkable rise in national economic prosperity and sharp increase in personal and household income. Surplus oil economy and adoption of generous welfare programmes by both UAE federal and Dubai local authorities have entirely transformed the social, economic and physical landscape of the country. One such area that has been highly influenced by the new wave of transformation and modernization is housing. Housing conditions in the pre-oil era were grim as more than 80% of the inhabitants were housed in overcrowded makeshift dwellings made of palm leaves referred to locally as *barasti*. By the end of 1960s, housing conditions were undergoing major improvements as the government began to use oil money in subsidizing both income and housing in the form of free serviced residential plots for all middle-income national households and guaranteed high-paying public sector jobs. With better income and increasing subsidies, housing consumption among newly emerging middle-income households during this period had improved dramatically as overcrowding dropped from 3.2 to only 1.6 persons per room and the per capita share of domestic space rose from 15 to 32 square metres per inhabitant.

Following the examples of other oil-rich Arab Gulf states such as Saudi Arabia, Kuwait and Emirate of Abu Dhabi, in 1993, the Dubai government introduced a new housing policy scheme aimed at providing middle-income households with interest-free housing loans in order to facilitate their access to what the government calls adequate owner-occupant housing. The value of each loan was set at AED 500,000 (\$136,240) with a repayment period of 25 years. Although the value of the loan was set to enable middle-class households to build and consume adequate housing, adequate housing itself has never been clearly defined. From the time since the interest-free loan programme was introduced, typical middle-class dwellings have more than doubled in size and average housing consumption rate has climbed to 71.5 square meters per person exceeding all national, regional and international rates. Moreover, the average number of person per room has declined sharply to only 0.6.

This research aims to study the various causes behind the major increase in the size of the contemporary middle-class dwellings and the subsequent rise in the rates of housing consumption among this study population. It aims to examine the implications of the current interest-free loan policy and the consequences of the prevailing high levels of housing consumption for loan beneficiaries and other applicants.

The interest-free housing loan policy has several shortcomings. It has triggered high demand in relationship to supply. Because of shortage in budget, high value of individual loans and very long repayment period, a major backlog of eligible applications has emerged and waiting time has been increasing steadily. Moreover, the policy has also enabled the few to over-consume scarce housing resources, while providing no assistance for the majority. The interest-free loan policy does not match the specific needs and preferences of the target population. It assumes that all middle-class households have similar housing needs and does not recognize in any way difference in income, household size and aspirations within the various target population subgroups. Additionally, the strict ban on the sale of the dwelling units imposed by the government has trapped many households in large and mostly under-utilized dwellings.

---

## TABLE OF CONTENTS

---

<b>Dedication</b>	ii
<b>Abstract</b>	iii
<b>Table of Contents</b>	iv
<b>List of Figures</b>	ix
<b>List of Tables</b>	xii
<b>List of Plates</b>	xv
<b>Acknowledgements</b>	xvii
<b>Abbreviations</b>	xviii
<b>Glossary of Local Terms</b>	xix

### **CHAPTER ONE: INTRODUCTION TO THE STUDY**

<b>1.1</b>	<b>Important Quotes</b>	<b>2</b>
<b>1.2</b>	<b>Statement of the Problem</b>	<b>3</b>
<b>1.3</b>	<b>The Objectives of the Study</b>	<b>4</b>
<b>1.4</b>	<b>Research Questions</b>	<b>5</b>
<b>1.5</b>	<b>Study Target Population</b>	<b>6</b>
<b>1.6</b>	<b>Thesis Organization</b>	<b>8</b>

### **CHAPTER TWO: THEORETICAL PERSPECTIVES**

<b>2.1</b>	<b>Introduction</b>	<b>12</b>
<b>2.2</b>	<b>What is Consumption?</b>	<b>13</b>
<b>2.2.1</b>	<b>Defining Housing Consumption</b>	<b>15</b>
<b>2.3</b>	<b>The Determinants of Housing Consumption</b>	<b>16</b>
<b>2.3.1</b>	<b>Income and Wealth</b>	<b>19</b>
<b>2.3.2</b>	<b>Subsidies</b>	<b>22</b>
<b>2.3.3</b>	<b>Social Status and Identity</b>	<b>26</b>
<b>2.3.4</b>	<b>Housing Standards and Regulations</b>	<b>29</b>
<b>2.3.5</b>	<b>Land Availability and Cost</b>	<b>32</b>
<b>2.3.6</b>	<b>Housing Type and Tenure</b>	<b>35</b>
<b>2.3.7</b>	<b>Construction Technology</b>	<b>37</b>
<b>2.3.8</b>	<b>Home-Hospitality</b>	<b>39</b>
<b>2.4</b>	<b>Theoretical Approaches to Housing Consumption Standards</b>	<b>40</b>
<b>2.4.1</b>	<b>The Functionalist/ Normative Approach</b>	<b>42</b>
<b>2.4.1.1</b>	<b>Critique</b>	<b>44</b>
<b>2.4.2</b>	<b>The Market-Based Approach</b>	<b>45</b>
<b>2.4.2.1</b>	<b>Critique</b>	<b>46</b>
<b>2.4.3</b>	<b>The Cultural-Relativist Approach</b>	<b>48</b>
<b>2.4.3.1</b>	<b>Critique</b>	<b>49</b>
<b>2.4.4</b>	<b>The Universal Standard Approach</b>	<b>50</b>
<b>2.4.4.1</b>	<b>Critique</b>	<b>52</b>
<b>2.5</b>	<b>The Housing Under-Utilization Discourse</b>	<b>53</b>
<b>2.6</b>	<b>Housing Consumption and Adjustment Model</b>	<b>61</b>
<b>2.7</b>	<b>Summary</b>	<b>76</b>



## **CHAPTER THREE: RESEARCH DESIGN & METHODOLOGY**

<b>3.1</b>	<b>Introduction</b>	<b>80</b>
<b>3.2</b>	<b>Research Design and Methodology</b>	<b>80</b>
<b>3.3</b>	<b>The Structured Interview Sample Survey</b>	<b>84</b>
3.3.1	The Owner-Occupant Schedule	86
3.3.2	The Owner-To-Be Schedule	87
<b>3.4</b>	<b>The Sampling Procedures</b>	<b>89</b>
3.4.1	The Quota Sampling Method	90
3.4.2	Sample Size	91
<b>3.5</b>	<b>Why Dubai Emirate?</b>	<b>93</b>
<b>3.6</b>	<b>Access to the Objects of the Inquiry</b>	<b>94</b>
<b>3.7</b>	<b>The Semi-Structured Interviews</b>	<b>98</b>
<b>3.8</b>	<b>Site/ Field Observations</b>	<b>100</b>
<b>3.9</b>	<b>Secondary Data</b>	<b>102</b>
3.9.1	Housing Units Floor Plans	102
<b>3.10</b>	<b>Analysis of Data</b>	<b>104</b>
3.10.1	Quantitative Data	104
3.10.2	Qualitative Data	106
<b>3.11</b>	<b>Research Obstacles and Methodological Limitations</b>	<b>106</b>
<b>3.12</b>	<b>Summary</b>	<b>109</b>

## **CHAPTER FOUR: HOUSING POLICY, INSTITUTIONS, DEVELOPMENT PROCESS AND EVOLUTION**

<b>4.1</b>	<b>Introduction</b>	<b>111</b>
<b>4.2</b>	<b>The United Arab Emirates (Background)</b>	<b>111</b>
<b>4.3</b>	<b>Political System and Structure</b>	<b>113</b>
<b>4.4</b>	<b>Economic Structure and Conditions</b>	<b>117</b>
<b>4.5</b>	<b>Demographic Composition and Characteristics</b>	<b>120</b>
<b>4.6</b>	<b>The Emergence of the Modern Welfare State and its Future Prospects</b>	<b>123</b>
<b>4.7</b>	<b>The Emergence of the New Middle-Class</b>	<b>128</b>
<b>4.8</b>	<b>Housing Provision Policy in Dubai</b>	<b>132</b>
4.8.1	Housing Provision of the National Population	132
4.8.2	Housing Provision of the Expatriate Population	135
<b>4.9</b>	<b>Middle-Class Nationals' Housing in Historical Perspective (from huts to Mansions)</b>	<b>138</b>
4.9.1	Traditional Pre-Oil Phase (1900-1965)	138
4.9.1.1	Houses of the Poor and the Working Class	139
4.9.1.2	Houses of the Merchants and the Ruling Elite Class	142
4.9.2	Transitional Post-Oil Phase (1965-1990)	146
4.9.3	Contemporary Post-Oil Phase (1990- To-Date)	150
<b>4.10</b>	<b>Contemporary Housing Development Process and Key Institutional Actors</b>	<b>153</b>
4.10.1	Land Allocation Policy and Regulations	159

4.10.2	Housing Financing Institutions, policies and Procedures	163
4.10.2.1	Private Housing Finance Scheme (Local Government)	163
4.10.2.2	Sheikh Zayed's Housing Programme (Federal Government)	167
4.10.3	Private Housing Design Consultants	170
4.10.4	Dubai Municipality	173
4.10.5	The Building Contractors	174
4.11	Summary	176

## **CHAPTER FIVE: SOCIO-ECONOMIC CHARACTERISTICS, HOUSING CONDITIONS OF THE STUDY POPULATION AND ANALYSIS OF DWELLING UNIT SPACES**

5.1	Introduction	179
5.2	Socio-Economic Characteristics	179
5.2.1	Population Distribution by Income Strata	179
5.2.2	Age	182
5.2.3	Employment	183
5.2.4	Marital Status and Gender	183
5.2.5	Educational Attainment	184
5.2.6	Household Size and Type	184
5.3	Housing Conditions	186
5.3.1	Previous Tenure	186
5.3.2	Cost of Housing Construction	188
5.3.3	Types and General Composition of Dwelling Units	190
5.3.4	Number and Size of Rooms Per Dwelling Unit	195
5.3.4.1	Number and Size of Bedrooms	195
5.3.4.2	Number and Size of Living-rooms	202
5.3.4.3	Number and Size of Dining Rooms	206
5.3.4.4	Number and Size of Guest Reception Rooms (Majlis)	209
5.3.4.5	Number and Size of Bathrooms/ Toilets	213
5.3.4.6	Number and Size of Servant Rooms	217
5.3.4.7	Number and Size of Kitchens	220
5.3.4.8	Other Rooms	222
5.3.5	Summary of Dwelling Units Floor-Areas and Rates of Space Consumption Per Income Sub-Group	225
5.6	Sources of Construction Finance	229
5.7	Summary	231

## **CHAPTER SIX: FACTORS INFLUENCING INCREASE IN DWELLING UNIT SIZES AND HOUSING CONSUMPTION AMONG MIDDLE-CLASS HOUSEHOLDS**

6.1	Introduction	234
6.2	The Role of Subsidies	234
6.3	The Role of Private Financing and Credit	241
6.4	Socio-Cultural Factors	247
6.4.1	Social Prestige and Distinction	248

6.4.2	Social Influence and Conformity	256
6.4.2.1	Why Conform?	261
6.4.2.2	Social Influence Information Gathering Sources and Methods	263
6.4.2.3	Normative Conformity	267
6.4.2.3.1	Fear of Ridicule and Criticism	267
6.4.2.3.2	Altruism and Fear of Social Stigma	270
6.4.2.3.3	'We are not less than them' (Jealousy)	271
6.4.2.4	Informational Conformity	272
6.4.2.4.1	'Others know better'	273
6.5	The Role of Women (Wives)	274
6.6	The influence of Richer Neighbours' Homes	276
6.7	The Role of Design Consultants	278
6.8	Summary	281

## **CHAPTER SEVEN: POLICY IMPLICATIONS OF HIGH RATES OF HOUSING CONSUMPTION AND TARGET GROUP PREFERENCES**

7.1	Introduction	284
7.2	High and Rising Cost of Housing Provision	284
7.2.1	House Price-to-Income Ratio (an affordability concern)	287
7.3	Consideration of Post-Construction/ Occupancy Costs	290
7.3.1	Housing Consumption and Housekeeping Requirements and Cost	294
7.3.2	Dwelling Size and Electricity Cost	297
7.4	The Overall Perceived Cost of Existing Housing Consumption	299
7.5	A Home for a Life-Time (bait alumor)	301
7.5.1	Reasons for Preferring to Build in One Stage	303
7.6	Housing Adjustment Preferences	304
7.6.1	Adjustment Preferences and Number of Years Staying in the Dwelling	305
7.6.2	Reasons for Preferences to Adjust Existing Housing Consumption	306
7.6.3	The Perceived Cost of Housing Consumption and Preferences for Housing Adjustment	309
7.7	Housing Space Utilization Pattern	310
7.7.1	Utilization of Guest Reception Room (majlis)	311
7.7.2	Utilization of Dining Rooms	313
7.7.3	Unused Rooms and Spaces	314
7.8	An Alternative Housing Provision Approach (the ready-built dwelling)	315
7.8.1	Willingness to Accept a Ready-Built Dwelling	318
7.8	Summary	320



## **CHAPTER EIGHT: SUMMARY OF FINDINGS & RECOMMENDATIONS**

<b>8.1</b>	<b>Introduction</b>	<b>324</b>
<b>8.2</b>	<b>Study Conclusions</b>	<b>324</b>
<b>8.3</b>	<b>Study Recommendations</b>	<b>331</b>
<b>8.3.1</b>	<b>Develop and Adopt Standards for Appropriate/ Adequate levels of Housing Consumption</b>	<b>334</b>
<b>8.3.2</b>	<b>Provide Training/ Technical Assistance on Housing Design</b>	<b>334</b>
<b>8.3.3</b>	<b>Encourage Phased Extension and Growth of Dwellings</b>	<b>339</b>
<b>8.3.4</b>	<b>Avoid Haphazard Mixing of High-Income Dwellings With Middle-Income Housing Areas</b>	<b>340</b>
<b>8.3.5</b>	<b>Initiate the Ready-Built Dwelling Units Option Approach</b>	<b>347</b>
<b>8.3.6</b>	<b>Introduce the Right to Sell Policy</b>	<b>349</b>
<b>8.3.7</b>	<b>Adjust Loan Repayment Structure</b>	<b>350</b>
<b>8.4</b>	<b>Concluding Remarks</b>	<b>349</b>
<b>8.5</b>	<b>Further Areas of Research</b>	<b>350</b>

<b>BIBLIOGRAPHY</b>	<b>354</b>
---------------------	------------

## **APPENDICES**

<b>1</b>	<b>The Owner-Occupant Questionnaire</b>	<b>389</b>
<b>2</b>	<b>The Owner-to-be Questionnaire</b>	<b>394</b>
<b>3</b>	<b>The Semi-Structured Interview Guide (Private Architectural/ Engineering Consultants)</b>	<b>399</b>
<b>4</b>	<b>The Semi-Structured Interview Guide (Building, Housing and Planning Officials- Dubai Municipality)</b>	<b>400</b>
<b>5</b>	<b>The Semi-Structured Interview Guide (The Private Housing Finance Scheme “PHFS” &amp; The Sheikh Zayed Housing Programme “SZHP”) Officials</b>	<b>401</b>
<b>6</b>	<b>Major Historical Development in the Housing Policy and Institutions in Dubai Emirate- 1957-2004</b>	<b>402</b>
<b>7</b>	<b>Examples of Middle-Class Residential Areas, Dwelling Floor Plans and Elevations and Photos of Interior Spaces</b>	<b>403</b>

---

## LIST OF FIGURES

---

### CHAPTER ONE

Figure 1.1	The study population identification	7
------------	-------------------------------------	---

### CHAPTER TWO

Figure 2.1	Consumption as a theme of inquiry within different social science disciplines	14
Figure 2.2	The determinants of housing consumption	19
Figure 2.3	Comparison between the American Public Health Association & the British Parker Morris minimum housing standards	31
Figure 2.4	A conceptual model of household's housing consumption and adjustment	64

### CHAPTER THREE

Figure 3.1	The geographical distribution of contemporary residential districts in Dubai Emirate	96
------------	--	----

### CHAPTER FOUR

Figure 4.1	Dubai Emirate local government structure	116
Figure 4.2	Current methods of housing provision for nationals in Dubai Emirate	134
Figure 4.3	Methods of housing provision for expatriate population in Dubai Emirate	135
Figure 4.4	Typical layout plan for a barasti dwelling in Dubai Emirate	141
Figure 4.5	Typical layout plan for a merchant's traditional dwelling in Dubai Emirate	144
Figure 4.6	Typical layout plan of a transitional Arabic courtyard dwelling in Dubai Emirate	148
Figure 4.7	The general process of middle-income private dwelling development in Dubai Emirate	155
Figure 4.8	Annual distribution of serviced residential plots to nationals in Dubai Emirate 1990- 2002	162
Figure 4.9	Number of loan applications, approvals and waiting list for PHFS 1993 to 2006	165
Figure 4.10	Number of loan applications, approvals and waiting list for SZHP 1999 to 2006	168

### CHAPTER FIVE

Figure 5.1	Income sub-group distribution for owner-occupants and owners-to-be	180
Figure 5.2	Age structure of owner-occupants and owners-to-be	182

Figure 5.3	Household size for owner-occupants and owners-to-be	185
Figure 5.4	Types of previous tenure for owner-occupants and owners-to-be	186
Figure 5.5	The per square metre cost of construction for private middle-income dwellings in Dubai Emirate 1993-2002	189
Figure 5.6	Number of floors of dwellings units for owner-occupants	191
Figure 5.7	The functional subdivision of contemporary middle-income dwellings in Dubai Emirate	193
Figure 5.8	Number of service blocks per dwelling units	194
Figure 5.9	Percentage distribution of number of bedrooms for owner-occupants	198
Figure 5.10	The size of master bedrooms	200
Figure 5.11	The size of bedrooms	202
Figure 5.12	Percentage distribution of number of living rooms for owner-occupants	204
Figure 5.13	The size of living rooms	206
Figure 5.14	Percentage distribution of number of dining rooms for owner-occupants	207
Figure 5.15	The size of dining rooms	209
Figure 5.16	Percentage distribution of number of Guest reception room (majlis) for owner-occupants	211
Figure 5.17	The size of guest reception room (majlis)	213
Figure 5.18	Percentage distribution of number of bathroom and toilet for owner-occupants	214
Figure 5.19	The size of bathrooms	216
Figure 5.20	The size of toilets	216
Figure 5.21	Percentage distribution of number of servant room for owner-occupants	218
Figure 5.22	The Size of servant rooms	219
Figure 5.23	Percentage distribution of number of kitchen for owner-occupants	221
Figure 5.24	The size of kitchens	222
Figure 5.25	A Cartoon from a local newspaper	225
Figure 5.26	The median number of rooms in middle-income dwelling units	226
Figure 5.27	Comparison between the minimum room size standards and the median of actual room sizes for middle-income dwellings	227
Figure 5.28	Sources of dwelling units construction finance by income subgroup for year 2002	230

## CHAPTER SIX

Figure 6.1	The approximate number of square metres of middle-income dwellings that could be built with only the AED 500,000 interest-free housing loan 1993-2002	235
Figure 6.2	Respondents' perception of the social importance of dwelling size	260
Figure 6.3	A conceptual framework of social influence in housing design process	262



Figure 6.4	Reasons for visiting dwelling location before and during design	264
Figure 6.5	A cartoon from a local newspaper in Dubai Emirate	268

## CHAPTER SEVEN

Figure 7.1	The average per square metre construction cost of middle-income dwellings in Dubai Emirate 1993, 2000, 2005. 2010 & 2015	285
Figure 7.2	The projected cost of median sized dwelling unit for the three income sub-groups for years 2010 & 2015	286
Figure 7.3	Comparison of median house price-to-income for selected world regions and study sub-groups	288
Figure 7.4	While designing your house, did you ever consider any of the following post-construction costs	291
Figure 7.5	The perceived cost current housing consumption	300
Figure 7.6	Reasons for considering moving out of current dwelling	307
Figure 7.7	How many times did you receive guests in your majlis during the past thirty days	311
Figure 7.8	Households with designated dining room and type of room used for regular daily household's dining	313

## CHAPTER EIGHT

Figure 8.1	Comparison of per capita space consumption between population subgroups and other income groups of the world	332
Figure 8.2	The proposed general process for the ready-built approach	342

---

## LIST OF TABLES

---

### CHAPTER ONE

Table 1.1	Study population strata	8
-----------	-------------------------	---

### CHAPTER TWO

Table 2.1	An international income-based comparison of housing consumption	22
Table 2.2	Australia's national standards for appropriate housing occupancy	30
Table 2.3	International comparison of average floor space per dwelling by tenure type	36
Table 2.4	Housing under-utilization categories and thresholds	57

### CHAPTER THREE

Table 3.1	The general structure of the mixed method approach	83
Table 3.2	Summary of research inquiry and methods of data collection	82
Table 3.3	The owner-occupant survey inquiry and purpose	87
Table 3.4	The owner-to-be survey inquiry and purpose	88
Table 3.5	The distribution of owner-occupant population by income category	89
Table 3.6	The distribution of owner-to-be population by income category	90
Table 3.7	The sample size of owner-occupant population by income sub-group	92
Table 3.8	The sample size of owner- population by income sub-group	93
Table 3.9	Summary of the overall population and sample	93
Table 3.10	The contemporary residential districts covered in the sample	95

### CHAPTER FOUR

Table 4.1	Population growth in Dubai Emirate	122
Table 4.2	Employment of nationals in the bureaucracy within Dubai Emirate (local & Federal) 2003	129
Table 4.3	Comparative summary of dwelling size and housing consumption for the three phases	153
Table 4.4	Summary of PHFS and SZHP's total applicants, approved loans and waiting list until 2006	170

**CHAPTER FIVE**

Table 5.1	The size distribution of master bedrooms in square metres	199
Table 5.2	The size distribution of bedrooms in square metres	201
Table 5.3	The size distribution of living rooms in square metres	205
Table 5.4	The size distribution of dining rooms in square metres	208
Table 5.5	The size distribution of guest reception rooms (majlis) in square metres	212
Table 5.6	The size distribution of bathrooms and toilets in square metres	215
Table 5.7	The size distribution of servant's rooms in square metres	219
Table 5.8	The size distribution of kitchens in square metres	222
Table 5.9	Comparison of median dwelling size and per capita housing consumption by income sub-group	228

**CHAPTER SIX**

Table 6.1	What size house would have you built if there was interest-free loan from the government compared to the one built with the loan? Owner-occupants	237
Table 6.2	What size house would have you built if there was interest-free loan from the government compared to the one built with the loan? Owner-to-be	239
Table 6.3	What size house would have you built if you were granted an interest-free loan of only AED 250,000 from the government compared to the one built with the full loan of AED 500,000?	240
Table 6.4	Have you taken personal loan to supplement your government housing construction loan?	243
Table 6.5	Before you started designing your home, did you decide on a budget for construction?	243
Table 6.6	Did the actual cost of construction exceed your anticipated budget?	245
Table 6.7	Is the size of your house important for exposing your social status and prestige?	249
Table 6.8	The 'means' of dwelling size and consumption indicators and importance of dwelling size for exposing distinct social status and prestige	250
Table 6.9	It is important that your house should be as large as your relatives, friends and nieghbours' houses?	259
Table 6. 10	Distribution of conformity to dwelling size by type of conformity motives	262
Table 6.11	Those of who visited to observe the sizes of houses built by others and the importance of conformity to sizes of houses of others in the social group	265

**CHAPTER SEVEN**

Table 7.1	Median house price-to-income ratio by study population sub-groups for 2002	287
Table 7.2	Relationship between rates of housing consumption and number of hired full-time housemaids	295
Table 7.3	Relationship between dwelling size and cost of domestic electricity consumption	298
Table 7.4	Do you prefer building your house in stages or all at once?	302
Table 7.5	Have you ever considered moving out of your current dwelling unit?	305
Table 7.6	Number of years in dwelling for households who considered moving	305
Table 7.7	Cost of current housing consumption and whether considered moving out of dwelling	309
Table 7.8	Would you accept if the government designed and built homes and then allocated them against the interest-free loan instead you going through designing and constructions?	318



---

## LIST OF PLATES

---

### CHAPTER FOUR

Plate 4.1	Map of the United Arab Emirates	112
Plate 4.2	Severe overcrowding in an expatriate labour accommodation, in Dubai Emirate	136
Plate 4.3	Palm-frond barasti homes dominated the housing stock in the UAE well until the middle of 1960s	140
Plate 4.4	Rows of barasti homes in Dubai in 1962	140
Plate 4.5	The houses of the merchants with their famous wind-towers in the pre-oil Dubai City	143
Plate 4.6	A narrow and decorated room in a traditional coastal coral stone home	145
Plate 4.7	An Arabic courtyard house that was built in 1976	148
Plate 4.8	A contemporary middle-income villa in Dubai	152
Plate 4.9	An aerial view of a sprawling middle-class suburban development in Dubai	161
Plate 4.10	An official meeting of the PHFS Committee	166
Plate 4.11	One of the 133 small size private consulting offices in Dubai	172

### CHAPTER FIVE

Plate 5.1	A corner view of an interior of a master bedroom	197
Plate 5.2	An interior of a living room (saala) furnished with both sofa and traditional sitting suites	203
Plate 5.3	A dining room in a middle-income home in Dubai	207
Plate 5.4	An interior of guest reception room (majlis) in a middle-income dwelling	211
Plate 5.5	An interior of a dressing room in a middle-income master bedroom	223

### CHAPTER SIX

Plate 6.1	An advertisement of one of many personal loan offers provided by a private bank in Dubai	242
Plate 6.2	This villa has been standing incomplete for over two years because its owner could not secure adequate funds to finish it	246
Plate 6.3	A modern villa façade design	253
Plate 6.4	A classical Greek villa façade	253
Plate 6.5	A contemporary villa in a traditional elevation design	254
Plate 6.6	A villa built with a façade known locally as the 'American Style'	254
Plate 6.7	A stained-glass dome villa in a middle-income home	255
Plate 6.8	An example of a high-income villa within a middle-class area	277

**CHAPTER SEVEN**

Plate 7.1a	83 percent of all middle-income households are now employing two housemaids to look after their large homes	294
Plate 7.1b	A housemaid at work in a middle-income home in Dubai	294
Plate 7.2	This guest reception room (majlis) and its dining room have not been used for their original intended use since it was built five years ago	314

**CHAPTER EIGHT**

Plate 8.1	A middle-income villa being extended vertically in Dubai	338
-----------	--	-----

---

## ACKNOWLEDGEMENTS

---

The development of this research owes much to the contribution, assistance and guidance of many individuals and organizations.

First and foremost, I would like to express my sincere appreciation and gratitude to my academic supervisor Dr. A. Graham Tipple for his continuous guidance, assistance and valuable comments in shaping and providing direction for this research. I would like also to thank Dr. Tipple for providing me with his moral support and encouragement during my short illness in the second year of this research.

I am also grateful to the Government of the United Arab Emirates, represented by the Ministry of Higher Education and Scientific Research for providing me with a scholarship and study leave to pursue this research.

My thanks are also due to the members of staff at the Private Housing Finance Scheme (PHFS) and the Sheikh Zayed Housing Programme (SZHP) who helped with providing significant amount of data and for sparing so much of their times for discussing various issues pertinent to the research topic. I would like to thank all officials, local researchers and private consultants for their kindness and generosity to participate and contribute in the interviews conducted as part of the fieldwork.

Last, but not least, I would like to thank all members of my beloved family, my father, my mother, my brothers and sisters, my mother-in-law, my wife and children for their continual support and patience.

Salem A. Alshafiei  
Newcastle upon Tyne, England

---

# ABBREVIATIONS

---

<b>AED</b>	Arab Emirates Dirham (UAE national currency)
<b>DEC</b>	Dubai Executive Council
<b>DM</b>	Dubai Municipality
<b>PHFS</b>	Private Housing Finance Scheme
<b>SZHP</b>	Sheikh Zayed Housing Programme
<b>UAE</b>	United Arab Emirates



---

## GLOSSARY OF LOCAL TERMS

---

***al-howleh***: housewarming

***bait***: a home or a house.

***bait al-omor***: the house of the life-time.

***bait arabi***: arabic house used to refer to traditional courtyard house to distinguish from other dwellings like apartment, villa, townhouse etc.

***banai or ustad***: traditional builder.

***barasti***: dwelling unit made primarily of dried palm tree fronds used before oil for housing most working class poor families. Also known as areesh.

***barjeel***: traditional wind tower used for cooling the inside of homes.

***beshkar or khadem***: house-maid or domestic servant.

***diwan al-hakem***: the Ruler's Court, the central institution of local governance.

***esteshari***: building design consultant.

***gurfat nowm***: bedroom.

***gurfat taam***: dining room.

***hammam***: bathroom

***howey***: courtyard, also used to refer to open spaces in front yards in contemporary villas.

***ishraf***: construction supervision normally conducted by privately appointed consultant office.

***mahram***: closely related blood family members who cannot marry any of the female members in the household, like father, brother and uncle.

***majlis***: guest reception room (also pronounced as meelas).

***makhzan***: storage room, mainly used for storing food and other household belongings.

***matbakh***: kitchen.

***mulhaq***: services block in contemporary dwelling, separate from the main villa structure.

***muqawel* (plural: *muqaweelen*)**: building contractor in contemporary context.

***muwasafat***: house construction specifications in terms of material types and brands.

***saala***: living room or family hall.

***tasmeem***: design, in this context design of house floor plan, elevations and services systems and networks.

# **Chapter 1:**

## **INTRODUCTION TO THE STUDY**

## 1.1 IMPORTANT QUOTES

### Quote 1:

**‘In view of increasing cost of housing construction, I urge the UAE federal and local authorities to increase the amount of interest-free housing loan provided to UAE nationals from the current AED 500,000 to at least AED 700,000’** (*Fadhel Al-Darmaki - Member of UAE National Federal Council quoted in, Albayan Daily Newspaper, 12 Feb. 2004*).

### Quote 2:

**‘I do not think the government should consider increasing the value of the interest-free housing loan, as such increases may dramatically reduce the number of eligible households benefiting from the current loan system’** (*Ahmad Al-Rustmani - a prominent local architect, interviewed on 14 Oct. 2004*).

### Quote 3:

**‘In response on increased cost of private housing construction, the Government of Dubai has officially approved a decision to increase the values of interest-free housing loan from AED 500,000 to AED 750,000’.** (*Ahmad Al-tayer, Chairman of the Private Housing Finance Scheme (PHFS) Board, quoted in Al-Bayan, 15/9/2004*).

### Quote 4:

**‘Now that the government has increased the value of the interest-free loan we are beginning to see noticeable drop in the numbers of approved loans. We are bound to have a waiting-list that is even bigger than the one we had before this latest major increase in the value of the housing loan’.** (*Fareed Al-Mulla, the Director General of the Private Housing Finance Scheme (PHFS), interviewed on 13 May. 2006*).

## 1.2 STATEMENT OF THE PROBLEM

Before the discovery and exploitation of oil in international markets in the 1960s, the United Arab Emirates (UAE) was known to be amongst the world's poorest regions. Since then, the country has enjoyed remarkable rates of national economic prosperity and sharp rise in personal and household incomes. As a result, the UAE society has been transformed from a state of extreme deprivation into one with lavish and ostentatious consumption of all sorts of material goods by all international standards.

With the help of a surplus oil economy and the adoption of generous social welfare programmes through the institutions of the UAE federal government and the Dubai local authorities, the housing situation in the country in general and Dubai Emirate in particular has improved drastically during the last three decades. Among the most urgent housing problems that were addressed in the earlier periods of the new economic era included housing over-crowding, substandard structural conditions and lack of basic housing and community services and amenities. Since the early 1970s the Dubai Government has pursued ambitious housing policies in order to address existing and future housing issues and needs.

As part of its effort to improve the housing conditions for its rapidly growing national population, the government of Dubai has embarked on numerous housing subsidy schemes. Such initiatives which also clearly intended to promote home ownership, include the granting of serviced residential plots free of charge, the construction and distribution of free public housing units to low income households and more recently the awarding of large sums of interest-free housing loans for middle-income households. The implementation of these and other initiatives has led to considerable improvement in the housing conditions of the target household groups.

The new housing stock built in the Dubai Emirate during the last ten to fifteen years is dominated by owner-occupied detached single-household units built according to very high technical standards. Despite the noticeable decline in the average size of households and the pervasive shift from extended to nuclear-family, the average size of dwelling units has increased by nearly four times over the past thirty years, giving



Dubai nationals one of the highest rates of housing space per capita and one of the lowest person per room ratios in the world.

As competition for public funds keeps increasing year after year and the numbers of newly formed young households burgeon, calls for further rationalization of housing related expenditures have also been on the rise. The unprecedented increase in the housing space consumption is a source of concern as it could lead to increasing demands for more public subsidies and the rise in the overall cost of housing construction, operation and maintenance. Furthermore, the actual utilization of housing space in contemporary dwelling units has been questioned in some recent government technical papers on nationals' housing.

The purpose of this concurrent mixed methods study is to further our understanding of the causes and possible implications of increasing housing space consumption among middle-income households in Dubai Emirate in recent years by converging both quantitative and qualitative data. In this study two sets of structured surveys are utilised to examine the relationship between increase in housing space consumption and a set of key independent variables including income, housing subsidies and social status and conformity. It also intends to examine the attitude and preferences of households towards their existing and future housing conditions. Concurrently, the increase in housing space consumption will be explored utilizing a range of qualitative techniques, i.e., semi-structured and in-depth interviews with key stakeholders including heads of households, government officials, housing financing institutions, private architects, local economists, sociologists and anthropologists. The study will also examine other relevant qualitative and quantitative data from secondary sources including media archives, analysis of dwelling unit floor plans, field observation, official published and unpublished documents and historical photographs.

### **1.3 OBJECTIVES OF THE STUDY**

The core objective of this research study is to analyze the issue of increasing housing space consumption within contemporary middle-income population in Dubai Emirate. In a nutshell, the aim is to understand the scale of increase in housing space

consumption, how and why such increases have emerged, what are the various implications of such increases and, finally, what policies and measures are required to combat possible negative externalities resulting from increases in space consumption. The specific objectives of this study are:

- 1- Investigate the historical changes of dwelling unit in Dubai Emirate with particular reference to its form, size and spatial composition
- 2- Examine the underlying forces and factors that have influenced changes in dwelling unit size and thus, housing space consumption.
- 3- Investigate the users' (home owners and owners-to-be) attitude and preferences towards housing space and composition.
- 4- Discuss the implications of increasing housing consumption on households and society in general.
- 5- Discuss alternative future policy directions with regard to housing consumption.

The above objectives are, therefore, designed to provide an operational framework for an in-depth investigation of the extent, causes, implications and remedies of increase in housing consumption among the study target population.

## 1.4 RESEARCH QUESTIONS

This study will be guided by the following research questions:

- 1- What is the current government housing policy, what are its objectives, does it address specific standards and targets in relationship to housing space and, if so, do they conform to existing conditions? **This will be answered in chapter three.**
- 2- What is the typical development process of contemporary owner-occupied single-household housing unit? **This will be answered in chapter three.**

- 3- Who are the key stakeholders involved in the housing unit development process and what specific roles do they play in this process? **This will be answered in chapter three.**
- 4- Why has the dwelling unit size increased significantly in recent years, i.e., what are the most significant factors that have contributed in the recent increase in average dwelling size and how do they contribute to the problem? **This will be answered in chapter six.**
- 5- What are the most important implications/ impacts of high housing space consumption, particularly with regard to:
- Long-term housing cost and affordability.
  - Costs of operation and management of housing units.
  - Equity and fairness with regard to overall access to housing subsidies.
- This will be answered in chapters seven, three and five.**
- 6- How do the households currently utilize their dwelling units and how do they perceive their housing conditions, particularly with reference to space and size? **This will be answered in chapters seven and five.**
- 7- What policies and strategies are needed to address the problem of dwelling unit size? Can Dubai Emirate develop more efficient policies and standards yet safeguard the interest of various space requirements of the households? **This will be answered in chapter eight**

## **1.5 STUDY TARGET POPULATION**

This study is concerned with the issue of increasing housing space consumption within the middle-class<sup>1</sup> national households in Dubai Emirate. Thus, it is crucial to clarify at this stage that expatriate population of all income groups and nationals of low and

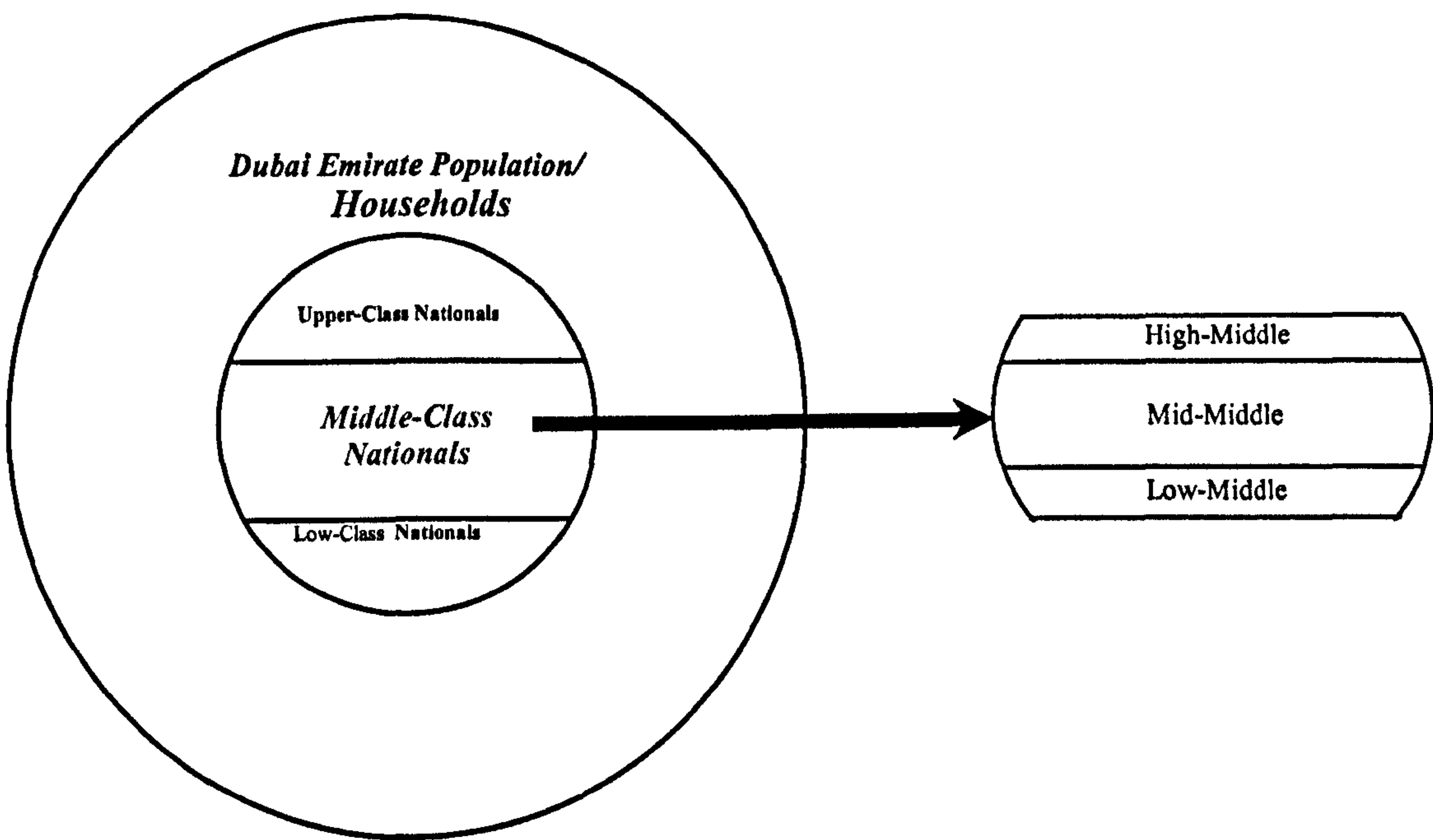
---

<sup>1</sup> In the context of this study the term '*middle-class*' is used in order to emphasise the socio-cultural and behavioural attributes and characteristics that influence housing consumption decisions of this study population. Reference to '*middle-income*' is only made when discussing issues pertinent particularly to specific income group or sub-group.



high-income groups are excluded from this study. Middle-class national population included in this study refers to all UAE national households who have either acquired and been living in owner-occupied dwelling units or are in the process of acquiring owner-occupied dwellings in Dubai Emirate. See figure 1.1.

Figure 1.1 The study population identification



In this study the middle-class population is defined according to an annual income<sup>2</sup> threshold of AED 60,000 and 300,000<sup>3</sup>. Because of the considerable difference between the lower and the upper boundaries of this income threshold and the desire to achieve more accurate and representative analysis of findings, the study target population has been further divided into three middle-class strata. Table 1.1 identifies the three main sub-groups of study target population adopted in the current study along with their corresponding income brackets.

<sup>2</sup> Income in the context of this study refers to the total and regular financial earnings from both wages and non-wage sources that are available for household use.

<sup>3</sup> Since 1981, the UAE Dirham (AED) has been fully pegged to US\$ at a fixed exchange rate of 3.67/ \$.



**Table 1.1 Study population strata and their income thresholds**

Sub-group category	Annual income
Low-Middle	AED 60,000 to 120,000
Mid-Middle	AED 120,001 to 240,000
High-Middle	AED 240,001 to 300,000

*Source: fieldwork: 2003-2004*

Chapter five presents detailed analysis and description of the study sub-group population in light of their specific socioeconomic characteristics.

**1.6 THESIS ORGANIZATION**

In order to sufficiently satisfy the specific aims and objectives and generate adequate and extensive answers to the key questions raised in this piece of research, the structure and organization of the thesis is built on eight major and well-integrated blocks.

**Chapter One**

This is the introductory chapter which elaborates on the purpose, rationale and significance of this study. Moreover, it spells out the study aims and objectives, states a set of research questions, specifies the study target population and finally clarifies the overall structure of the thesis.

**Chapter Two**

This chapter intends to place the study in an appropriate theoretical context. It provides basic definitions of the concept of consumption both in general and housing-specific terms. The literature review extensively covers major determinants of housing consumption, the theoretical approaches that underpin the development of housing

space consumption standards and the housing space under-utilization discourse. The chapter concludes with a critical review of the housing consumption and adjustment model.

### **Chapter Three**

Chapter four explains the research methodology and approach applied to this study and the rationale for their selection. Discussion includes the identification of the research procedures, enquiry instruments and methodological problems and limitations encountered by this piece of research.

### **Chapter Four**

With the objective of establishing a more in-depth understanding of the study area and issue context and background, chapter three covers a number of important topics. It begins with a detailed assessment of the economic, demographic and political conditions prevalent within the study area. This is followed by a review of the current housing provision policies applied to various target groups within the study area. The Chapter also critically examines the historical transformation of housing conditions and consumption rates by covering three milestone phases. Finally, it discusses in some detail the contemporary housing development process with emphasis on the key stakeholders and their strategic roles within this process.

### **Chapter Five**

Chapter five summarizes the socioeconomic characteristics of both owners and owners-to-be. Moreover, the chapter investigates the housing consumption attributes for the three target population subgroups. Analysis also includes detailed assessment of dwelling unit spaces by specific type of rooms and their functional categorization.

### **Chapter Six**

Chapter six identifies and discusses the most significant factors behind the huge rise in the size of contemporary dwelling units consumed by the study middle-class

households. Discussion focuses on the role of housing subsidies, private financing credits, socio-cultural factors and the role of private home design consultants among several others factors.

## **Chapter Seven**

Chapter seven investigates the various implications of the existing high trend of space consumption rates among the study population. It will investigate implications on housing affordability for each of the three study population subgroups, the cost of ongoing housing operation and maintenance. The chapter will also examine the housing consumption and adjustment preferences of the study population in the hope of formulating a more responsive and efficient housing policy framework.

## **Chapter Eight**

This chapter presents a summary of the main findings and issues covered in preceding chapters. It also includes a set of policy recommendations covering both immediate and medium-term requirements.

## **Chapter 2:**

# **THEORETICAL PERSPECTIVES**

## 2.1 INTRODUCTION

*The basic objective of housing policy is to meet real housing needs. It is therefore the quantity and quality of the material places we inhabit, as well as their suitability to our needs, that are the ultimate measures of the success or failure of housing policy (Angel, 2000: 250).*

Housing space standards and norms have always been important and integral elements of the housing policy debate throughout the developed and developing world. This interest in the subject is stimulated primarily by governments' housing agencies and organizations and housing researchers in making sure of the adequacy of dwelling units to satisfy the requirements of households of various sizes and composition within the different social, cultural, economic, environmental and political settings. The continuing debate on the issue of housing space consumption has been to a great extent controversial and unresolved. Despite the immense disagreement and differing opinions with regard to the most effective and desirable standards, housing space has managed to become one of the most prominent and widely recognised indicators and benchmarks of housing adequacy and quality across all continents.

The main purpose of this chapter is to place this study within an appropriate theoretical context by addressing the key issues and elements related to the aims and objectives stated in chapter one. It begins with a broad discussion of the concept of consumption followed by comments on housing space consumption, its significance, operational definitions of housing space consumption and measurement and the basis that have influenced them. It will then shed some light on selected key determinants of housing space consumption, including; economic factors (*wealth, income and subsidies*), socio-cultural factors (*social status and home hospitality*), land availability and cost, housing types and tenure, official regulations and standards, construction technology, design practices and experiences. That is then followed by a discussion of four theoretical approaches to housing space standards, namely, the normative/functionalist approach, the market-based approach, the cultural-relativist approach and finally the universal standards approach. The discussion will include the philosophical underpinnings and counter-arguments of each one of these four approaches. An overview of the housing space under-utilization discourse is presented



using the various opinions of the debate parties. The chapter will conclude with a discussion of a basic conceptual model of housing space consumption and adjustment that is proposed and explained in response to the overall debate and arguments of housing space consumption and utilization.

## 2.2 WHAT IS CONSUMPTION?

Before considering some of the more significant aspects of the literature pertinent to the main theme of this research which is concerned with the issue of rising housing space consumption among the middle-class households in Dubai Emirate, it is imperative that the concept of '*housing consumption*' is examined and defined within its general and specific contexts.

Consumption as an independent theme of social science inquiry suffered a long period of academic neglect (Miles and Paddison, 1998). It is only in the last three decades that social scientists have begun to address consumption as a key social, economic and cultural phenomenon and not just as an afterthought of certain socialization processes (Miller, 1995). The escalating and long-overdue academic and applied research interest in the subject has resulted in a wealth of literature covering topics from most basic elements of the concept to more complex and specialised themes (Slater, 1997).

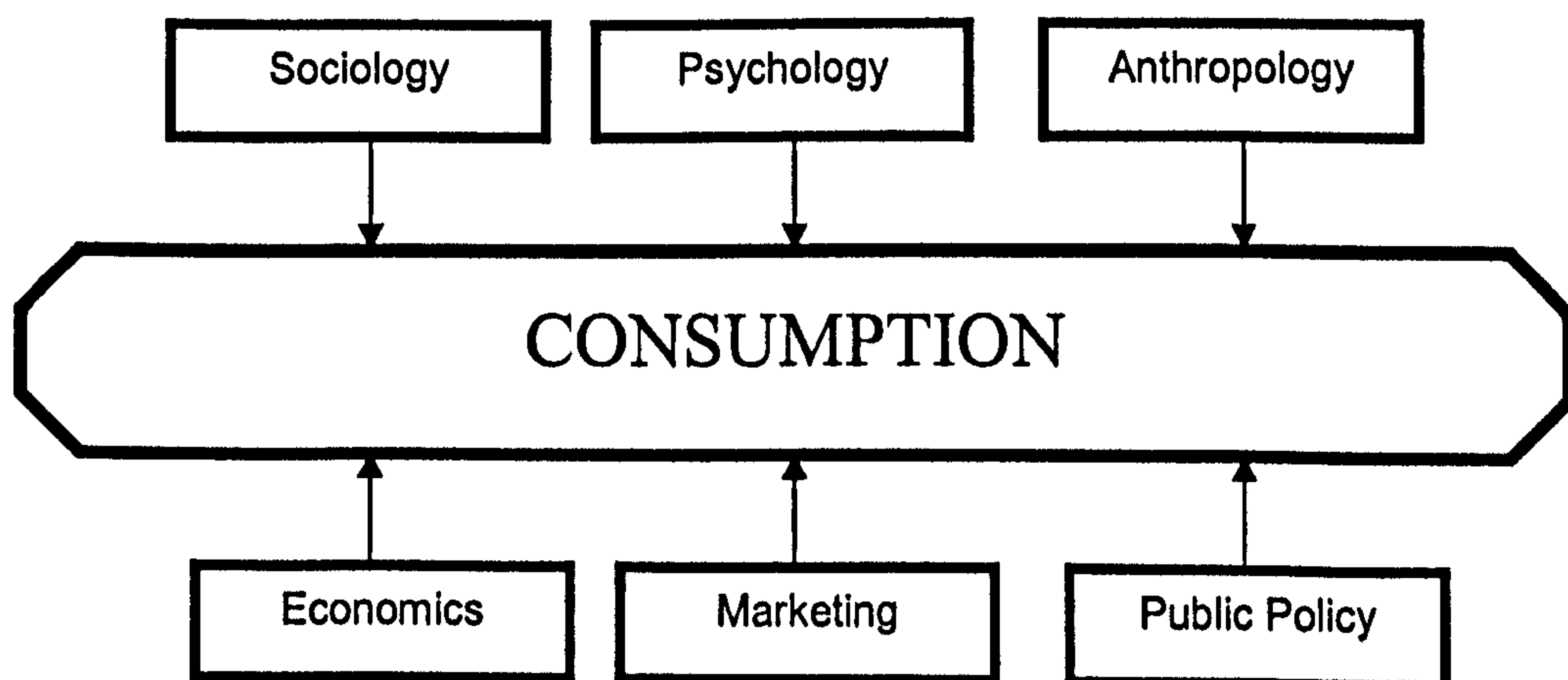
Like most major issues examined in the various disciplines of social sciences, consumption is nowhere near reaching a definition that could be universally satisfactory (Miller, 1995). Variations in the definitions proposed by various authors are caused primarily by difference of the bases of interest of each individual author (Connolly and Prothero, 2003). The very basic meaning of consumption refers to the '*purchase and use of goods*' by individuals and groups in a given human society (Miles and Paddison, 1998: 815). Campbell (1995) extends the foregoing definition further and suggests that consumption can be defined as;

*The process of selection, purchase, use, maintenance, repair and disposal of any product or services (Campbell, 1995: 102).*

Although the main thrust of Campbell's definition is rooted in the economic conception of consumption, which is exclusively focused on the utilitarian functions of consumption (Miles and Paddison, 1998 and Connolly and Prothero, 2003), it does, however, make clear that consumption must be viewed as a process that would normally involve a series of milestone actions besides the simple act of purchasing and using a good. Nevertheless, Campbell's definition falls short of recognizing the significant role consumption plays in the structuring and restructuring of social life and urban culture in modern-day society (Zukin, 1998; Slater, 1997; Elliot, 1997).

Confining our understanding of consumption to the strictly economic and utilitarian aspects of the phenomenon can impose serious limitations on our interpretation of the underlying causes of specific consumption behaviour and, thus, the effectiveness of necessary policy intervention measures that are needed to influence particular consumption issues (Wilk, 2002; Belk, 1988; Heiskanen and Pantzar, 1997). While the search for a truly comprehensive and inclusive definition of consumption may continue for a long time to come, the findings of the multi- and inter-disciplinary research to date have certainly made us more aware of the realities of the true meanings of consumption. See figure 2.1.

**Figure 2.1 Consumption as a theme of inquiry within different social science disciplines**



*Source: Author*

Outcomes from sociological, cultural and behavioural studies on this subject have suggested that consumption must be perceived as more than just the purchase and use of goods and services to merely satisfy material needs. Instead, consumption has much wider meanings within various human societies. It is found to play crucial roles as instruments of self-expression, individual and group identity-formation, communicating social and economic class messages, personal taste, creativity, artistic abilities and sense of achievement and pleasure (Wilska, 2003; Belk, 1988; Zukin, 1998). Therefore, consumption is a culturally constructed phenomenon and is relevant within particular space and historical contexts (Exertzoglou, 2003). According to Bauman (1995) consumption is more about;

*Manipulating symbols for all sorts of purposes. On the level of the life-world, it is for the purpose of constructing identity, constructing self, and constructing relations with others (quoted in Kilbourne et al. 1997: 7).*

One simple and logical conclusion that can be derived from the above and other definitions however, is that consumption is a process that may only occur in the presence of two basic elements, those are of course,

- (1) *Consumer(s)* which represent the subjects of the consumption process and,
- (2) *Consumable goods or services*, which represent the objects of the consumption process.

### 2.2.1 DEFINING HOUSING CONSUMPTION

Research on housing consumption has witnessed a growing interest throughout the second half of the twentieth century in both theoretical and practical policy terms (Clark, Deurloo and Dieleman, 2000; Pennance, 1977). It has focused primarily on two particular dimensions of the issue. First, considerable parts of the debate and analysis have been devoted to the problem of adequacy of housing consumption in meeting the needs of various types and sizes of households. Such concerns were then translated into housing policies and standards that had served as the basic instruments



for guiding the collective decisions of governments to achieve desirable levels of consumption of both quantity and quality of housing.

Second, an important theme for housing consumption research is one that has scrutinised both the use and meaning of housing within different human cultures and subcultures (Arias, 1993; Lawrence, 1982). The concern has been with how and why dwellings as objects of housing consumption are used the way they are and with the symbolic and practical meanings of housing to their consumers at both individual and group levels (Rapoport, 2001, 1982; Csikszentihalyi and Rochberg-Halton, 1981).

In its crudest terms, housing consumption refers to the amount of domestic housing space purchased or rented and used by a household at a given time. According to Maher (1995:9), 'housing consumption can be measured broadly by the relationship between household size and dwelling capacity'. Housing capacity on the other hand, is determined in quantitative terms and based on two broadly utilised units of measurement, which are;

(1) *number of rooms*<sup>4</sup>: typically determined in terms of number of person per either bedroom or habitable room.

(2) *amount of floor space*: determined in terms of built-up floor space (e.g. *square metre of housing space*) per person.

## 2.3 THE DETERMINANTS OF HOUSING CONSUMPTION

Housing design in general and housing space and size in particular are outcomes of a rather complex process. This process is influenced by multiple sets of factors. These factors and their relevant importance vary from one place to another and from time to time.

---

<sup>4</sup> Definitions of what constitutes a room vary from one place to another and from time to time. International development organizations such as the United Nations have suggested broad definitions that could be applied in international and comparative contexts. Habitat (1993) for instance has defined a residential room as 'a space at least 4 square metre, enclosed by walls intended for residential use only. Examples would include, bedrooms, kitchens, living and dining rooms, guest reception rooms, servant rooms and studies. Hallways, verandahs, lobbies, bathrooms and rooms used for work or business purposes are not included'.

It is therefore, crucial that when discussing factors that determine house design, form and configuration, one must realize that;

*The design and characteristics of homes are a complex interplay of many factors taken together, and the contribution of separate factors is often impossible to ascertain. The matter is further complicated by the fact that a given variable may be important in one setting and culture, but may play hardly any role in another place (Altman and Chemers, 1980: 174).*

Authors from a wide range of disciplines (anthropology, geography, architecture, sociology, economics, archeology, psychology and city planning to name just a few), have shown varying degrees of interest in the subject of housing design and its associated characteristics and elements, including form, layout, building materials, size, and decoration. Those authors, as a result, have been able to contribute to the general understanding of the factors and forces that shape the physical outcome of the housing process through interpretation of physical and non-physical evidence.

Though it is not the intention of this piece of work to provide an encyclopedic coverage of all the literature on the subject, the readers, if interested, are advised to refer to; Rapoport (1969; 1982; 2001), Altman (1985), Duncan (1981;1985), Winnick (1957), Angle (2000), Megbolugbe, Marks and Schwartz (1991), Smith, Rosen and Fallis (1988), Kent (1981), Franklin (2001), Foote, et al. (1960), Jin (1993), Lawrence (1987; 1995), Reid (1962) and Beyer (1965), for detailed and single and multi-disciplinary discussions.

Having said that, this matter is, however, not entirely ignored here. The question addressing the factors that determine the housing space consumption and size is of central importance to this study and any attempt to overlook such a topic would prove inappropriate.

Wilk (2002: 9) argues that consumption is quite a complex product resulting from the 'balance of diverse forces' encountered by the consuming individuals or groups within particular contexts. He further contends that specific and prevailing

consumption patterns and behaviour can be understood in view of three basic interpretative criteria.

- (1) Consumption is *multigenic*, 'in the sense of having many causes'.
- (2) Consumption is *dynamic*, 'in the sense that the causes are both linked in multiple and complex ways' and that the causes may change with time and place.
- (3) Consumption is impelled by *incentives* and constrained by *limits and restraints*.

Franklin (2001: 88) agrees that this notion of complexity also applies to the housing consumption process and indicates that,

*Housing and (home) are part of an extremely complex narrative, in which the self, the diversity of humanity, social relations, cultural values, symbolic representations, Political and economic forces are all produced and reproduced.*

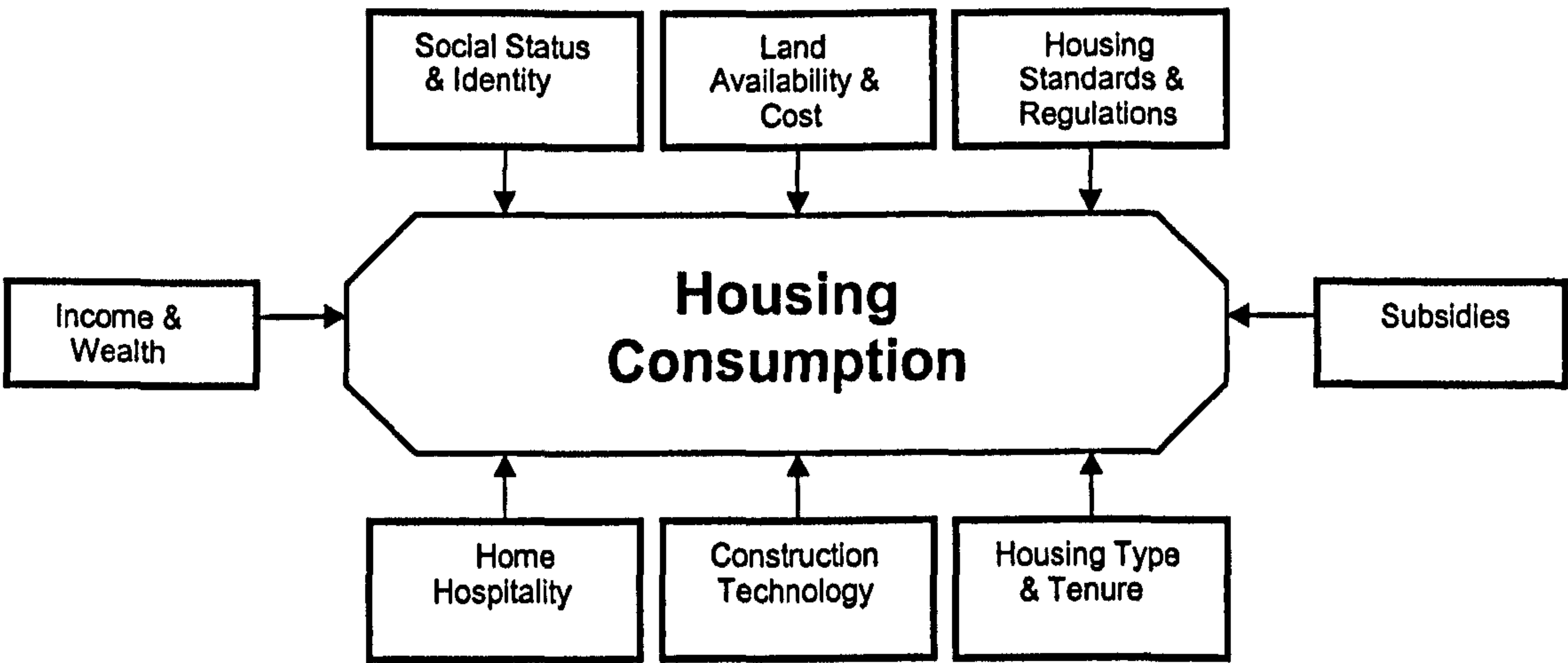
The World Bank (1993) on the other hand, places a great emphasis on the role of housing policy and housing delivery systems and their influences on housing space consumption and distribution.

Furthermore, the rates of housing space consumption are determined by numerous interrelated factors. They include vital elements such as; wealth, income and subsidies, the cost of housing space, land value, housing standards, housing and building regulatory systems, cultural values and norms, household size and life-cycle, housing tenure and types. Additionally, it is important to note that rates of housing space consumption are also affected by a host of other factors, many of which fall under individual differences in preferences for housing relative to other ways of spending income. However, not all of these factors are of equal importance, nor are the data always readily available to allow for the full analysis of the effect of each individual factor.



For the purpose of this study, a number of key factors or determinants of housing space consumption have been selected based on their perceived importance and relevance to the context of the current piece of research. Figure 2.2 illustrates the housing space determinants which are discussed in some detail in the subsequent parts of this section.

**Figure 2.2**The determinants of housing consumption



*Source: Author*

**2.3.1 INCOME AND WEALTH**

Access to housing both in terms of its quality and quantity, particularly in capitalist and mixed economies, depends to a great extent on personal and family wealth and income (Clark and Drever, 2000; Bramely, Bartlett and Lambert, 1995; Rossi, 1980). In fact, ‘economic capital has traditionally been conceptualised as the primary determinant of different forms of housing consumption’ (Flint and Rowlands, 2003: 215). This is certainly common knowledge, since housing as a commodity is influenced by market demand and supply forces. Housing space consumption and choice are, therefore, highly affected under various circumstances by factors of affordability which are the direct outcomes of both income and housing price within any given market condition. According to Beyer;

*Income is one of the most important elements in determining the size of dwellings families will select, since under average conditions, the square footage area that can be rented or purchased increases in a more or less direct relationship with increases in family income. Although certain families in high-income groups may, for reasons of convenience or location or other reasons, choose to live in relatively small apartments (Beyer, 1965: 127).*

Likewise, Reid (1962) asserts that income and household housing space consumption are strongly correlated. However, she further emphasizes the fact that housing space, particularly in terms of number of rooms, is only one factor of housing cost and quality. Therefore, households may choose to substitute other physical qualities for housing space to secure greater levels of space affordability.

*The higher the income and the lower the cost of housing compared to other products the more rooms per dwelling per person seems likely; and conversely, the lower the income or the higher the cost of acquiring or maintaining the space the fewer the number of rooms per dwelling units and per person seem likely to be other preferred characteristics. However, households will substitute space at low price combined with shabbiness for preferred facilities and newness. Hence, rooms per person are only a crude proxy for the quality of housing in general (Reid, 1962: 275).*

It is universally accepted that living in a house that contains more rooms or greater amounts of space is almost always considered advantageous (Sinai 2001). This is well articulated by Winnik (1957) in his monograph on the American housing space consumption. He indicates that, while acquiring additional housing space is perhaps highly desirable for almost all households, the economic cost of housing space is often quite beyond the means of most of the households.

*Because housing space is very expensive, the market rationing process is quite severe..... It is likely that most families would find additional space convenient if it were to cost them nothing. Our current density*



*pattern is largely a market phenomenon that results from economic scarcity of housing resources (Winnik, 1957: 4).*

Housing 'space and size have traditionally been viewed as the most visible evidence of a household's relative well-being' (Arias, 1993: 170). This is certainly true today as much as it was in ancient societies (Mumford 1972). Many housing consumers find smaller size homes as short term housing solutions and, with escalating income, they will probably seek larger and more spacious housing (Friedman 1993). The households' perception of the acceptable quality of housing space is very much tied to its income, perhaps much more than any other factor.

*Notions of an "excess" or "shortage" of space are not, of course, formed in an economic vacuum. With unchanged income a given quantity of space may become too small or too large as household size change. But even in the absence of any change in the character of the household, dissatisfaction with one's housing space will vary with income, a family finds that using a living room as a bedroom, hitherto an unpleasant expedient, becomes suddenly and plainly intolerable. Requiring two children to share a bedroom is likewise considered a realistic adjustment to a fall in income or to the discovery that an extra bedroom would add \$20 a month to the rent bill or \$1000 to the price of a home. Thus, changes in economic condition affect housing demand to an important extent by altering the consumer's judgment with respect to the adequacy of his housing space (Winnik, 1957: 6)<sup>5</sup>.*

The UN-Habitat (1993) examined housing space and income data from forty five different countries of both developed and developing world as part of an extensive Housing Indicators Programme (HIP), and found that income and housing space per person are closely correlated. The greater the income, the higher space per person and vice versa. Table 2.1 clearly indicates that, in high-income countries, the average floor area per capita is almost six times higher than that of the low-income countries. While the number of persons per room in high-income countries is no more than a quarter of

---

<sup>5</sup> This is a relatively old reference, however, its contents are still valid. Although the monetary values (\$20 and \$1000) mentioned are small by today's standards, they were significant then. Today, these figures could perhaps be replaced by (\$200 and \$50,000) respectively.

those found in low-income countries. Additionally, the median housing unit size in high-income countries is more than double the low-income countries, although average household size in low-income countries is more than twice as much as in high-income countries.

Table 2.1 An international comparison of housing consumption

<i>Income categories</i>	<i>Median House Size (m2)</i>	<i>Floor area per person (m2)</i>	<i>Person(s) per room</i>
Low- income countries	31	7.1	2.5
Low-mid-income countries	47	9.4	2.0
Upper-mid-income countries	67	15.9	1.3
High-income countries	75	31.5	0.7
All developing countries	52	10.1	2.0
Industrialised countries	75	31.0	0.7

Source: Angel (2000: 261)

On the more macro national level, ‘housing space and quality both improve systematically as economic development proceeds. In general, higher incomes associated with economic development permit greater spending on housing, which is in turn reflected in better housing- *more spacious*, more durable, with more secure tenure and with better facilities’ (World Bank, 1993: 25 emphasis added).

In Great Britain for instance, income levels have increased substantially after World War II. As a result, people have opted for more housing space and even for a second home in parts of the country (Evans 1991). Similarly, Clark, Deurloo and Dieleman (2000) argue that, in the United States, increasing income and household affluence coupled with a substantial reduction in household size have raised housing space consumption to record levels.

2.3.2 SUBSIDIES

In addition to market demand and supply forces which relate to households’ income and wealth, the quantitative and qualitative access to housing is also affected by housing subsidies (Drakakis-Smith, 1980). Housing subsidies as defined by Oxley and Smith (1996: 40-41) refer to the ‘explicit or implicit flow of funds initiated by

government activity which reduces the relative cost of housing production or consumption below what it otherwise what have been', relative to other goods and services<sup>6</sup>. Examples of housing subsidies would include, granting of free housing land, public land pricing, provision of free or below market price infrastructure, housing tax incentives, waivers of real estate taxes, reduced rents, low or no interest housing loans, etc. (Angel, 2000; Renaud 1987).

Increasing housing consumption (including space and other qualities), by reducing the relative cost of housing in the hope of improving overall housing conditions of subsidy recipients, is, therefore, the core objective of all types of housing subsidy initiatives (Smith, Rosen and Fallis, 1988). However, housing subsidies could very much be driven by a number of non-housing goals<sup>7</sup>. According to Angel (2000:111);

*Typical non-housing related goals that are often found to drive housing subsidy campaigns (either explicitly or implicitly) are redistributing income; creating employment; generating savings; slum clearance and redevelopment; jump-starting the economy; reviving the construction industry; maintaining peace and political stability; or reducing deficits and balancing budgets.*

Housing subsidies, in almost all cases, lead to the distortion of housing consumption patterns and consumers' housing preferences (Angel, 2000; Bourne 1981). This is caused primarily by the distortion of the real housing price (Cullingworth 1979; Bramley, Bartlett and Lambert, 1995) and the artificial limitation set on housing choices made available to the consumers. Mayo (1999) for instance, has argued that, the extent of distortion in housing consumption created by poorly targeted subsidies is substantial and far-reaching;

*Subsidy programs distort not just choices of some undifferentiated bundle of housing, but choices of a variety of housing attributes including interior*

---

<sup>6</sup> Subsidies are generally classified into three main categories. (1) *supply-side-subsidies*; are used to subsidize the housing producers by reducing their opportunity cost and investment risk. (2) *demand-side-subsidies*; are used to subsidize housing consumers by increasing their abilities to consume housing of a particular quality and quantity. (3) *Price-control*; involves imposing limits on rent, prices and interest rates.

<sup>7</sup> King (1998: 90-94) covers in some detail the multifarious objectives of housing subsidies in Britain.



*and exterior space, physical quality, durability, property rights, infrastructure access and location (Mayo, 1999: 22) (emphasis added).*

One of the most important negative implications of subsidies on housing consumption is the over-use of housing resources both in terms of its quantity and quality (Sanyal 1981). Subsidised housing is often prone to the problems of under-occupancy and relatively excessive space consumption per capita, when compared to normal market conditions (Clark, Deurloo and Dielman, 1984). Recent studies on the effects of housing subsidies in post-communist Eastern and Central European countries have revealed that poorly targeted subsidy initiatives have only helped higher-income groups who were not in need of such assistance to 'construct/ build larger dwellings than they would have otherwise been able to afford' (Lux, 2003: 249). Lansley (1979: 138-139) presented a similar argument within the British housing market where 'tax relief, which [benefited] those with the largest mortgages and highest incomes the most, [had] been a permanent encouragement to under-occupation and over-consumption'. In the United States, Baer (1979) and Gyourko and Voith (1997) have argued that housing space consumption has been increasing owing to many economic and social factors. However, government's policy on housing subsidies, particularly the federal income tax deduction for mortgage interest and property tax for homeowners, have been probably most instrumental in both increasing the scale of owner-occupied dwellings and pushing up the housing space consumption among those owner-occupied American households since the early 1960s.

*..... there are also government policies which work to encourage or thwart the consumption of extra space. One of the major policies is the federal income tax deduction for mortgage interest and property tax for homeowners. As income rise due to increased national prosperity and inflation, taxpayers move to higher tax brackets permitting higher percentage deductions, ameliorating the seemingly high costs for homeownership, and encouraging over-consumption (Baer, 1979: 224).*

Increasing housing consumption, as stated earlier, may be the exact objective of housing subsidies, but such externalities generated by those subsidies can be also criticised for their inefficiency, inequity and increasing demand for further subsidies

(King, 1998; Smith, Rosen and Fallis, 1988; Lansley, 1979). Housing subsidies may also have direct adverse impact on subsidy recipients themselves. According to Quercia and Rohe (1993: 28);

*....home ownership programs that provide subsidies in the form of below-market house prices or lower mortgage interest rates may encourage households to over-consume housing relative to their ability to pay for consumption in other areas, thus making these households housing rich, income poor<sup>8</sup>.*

To overcome the possibility of excessive consumption of housing resources as a result of subsidies, a number of solutions were introduced in different countries. Governments often established housing space and size standards particularly targeted to the publicly subsidised housing schemes (Yahya et al., 2001). Minimum standards for the amount and number of space and rooms and structural specifications were applied to these housing schemes throughout the developing world in order to reduce the overall cost of construction and ensure that the housing resources are efficiently and optimally utilised by the beneficiaries. This approach however has often led to the design of small and inadequate sizes of housing units particularly for larger households (Drakakis-Smith 1981). In other situations, governments' housing authorities in several socialist countries have tried to allocate housing units according to the size of households in order to avoid situations of overcrowding or under-occupancy (Sanyal, 1981). So if a household's demographic situation is changed by either adding a new member to the household or a member of the household moving out, the housing authority will have to be informed to adjust the households' housing space requirement based on the reported changes in family size and characteristics. Although this approach has helped in introducing a certain degree of efficiency and equity in public housing resource allocation, it faced a number of practical difficulties (Barelli, 1992). In many situations, households were reluctant to report changes in their conditions because they were attached to their units and perhaps have made

---

<sup>8</sup>In the United States, 'housing-rich, income-poor' households include those with less than 80 percent of the median community income and living in homes with a value greater than other households in the same income group, or with more space than needed based on the number of rooms in the unit and the household size' (Quercia and Rohe, 1993: 30). This phenomenon is largely associated with older households who own expensive and large homes, but have reduced incomes and low and middle-income households who receive relatively generous housing subsidies.



certain improvements to their current units which they did not want to give up. In other cases, even when households reported changes in their conditions, the housing authorities were slow and sometime indifferent in adjusting the housing space conditions of the households either owing to their inability to find more adequate housing units or their inadequate management of the public housing stock (Barelli, 1992).

### 2.3.3 SOCIAL STATUS & IDENTITY

Modern economic and sociological theories have proven that the decision of consumers to purchase a good cannot always be firmly explained by the intrinsic utility derived from consuming it (Grilo et al., 2001). 'Rather its rationale could be found in what the purchase of the good symbolizes to others' (Corneo and Jeanne, 1997:55). That is because people are greatly concerned about the opinions and judgements of others towards them (Piketty, 1998). In order to bolster their image, achieve the admiration and acceptance of others and maintain or reinforce their honor and esteem, individuals are often tempted to 'embellish their social standing through the public display of designer clothing and jewelry, luxury cars and homes' (Rothman, 2002: 3).

According to Rapoport (2001:158) the 'built environment, specially housing, plays an important role in communicating status, specially in contemporary societies'. Several other authors in the many allied fields of housing research and studies also share this view. Altman (1980) and Duncan (1985) for instance, suggest that differentiation of dwellings is often more elaborate in societies and cultures where greater stratification and distinctions are prominent among their members according to economic, political, religious and social status. Duncan (1981) however, derives an interesting concept pertinent to the communication of status through material commodities and particularly housing. Basing his analysis on this conception, he proposes that;

*In order to understand both attitudes towards, and use of the house in a range of different societies, one must understand the nature of the social structure in those societies.... there are central structuring relations in any society or social world within a society which produce a cluster of*

*subsidiary relations. Groups can be arrayed along a continuum from those whose central structuring relations are collectivistic to those whose relations are individualistic, and that these structuring relations produce very different attitudes towards display in general and the house in particular. Groups with collectivistic structuring relations overwhelmingly view the house as simply a container of women and goods, while individualistic groups normally see the house as a status symbol critical to ones social and personal identity (Duncan, 1981: 2-3).*

Lawrence (1987) holds a similar view of the role of housing in displaying personal and group status and identity. He suggests that housing serves not only as a vehicle for expressing a particular identity and status message to others, but also as a credential for esteem and the respect of others. Building on such a thesis, it is not therefore, surprising that, in some circumstances, housing display outstrips its use (Mumford, 1972) and that the ideal image of housing sometimes becomes even more significant than its actual utility (Rapoport, 2001).

Aside from its direct utilitarian benefits, individuals and households tend to express their identity and social status in housing through a number of physical and spatial means (Chapman, 1955). These include, the selection of prominent locations, use of ample floor space, increasing and diversifying the number and types of rooms, house façade, home decoration, colour, furniture, home entranceway design, garden and many others (Voordt, Vrielink and Van Wegan, 1997; Jin, 1993; Cooper, 1976). All those elements are widely used across various human societies for the purpose of transmitting and communicating information about the residents living within the homes (Harris and Brown, 1996). The use of both interior (private) and exterior (public) housing display elements suggests that the interest of homeowners is to attract the attention of both passersby and equally those more intimate who are invited into the house (Cooper, 1976).

Klaufus (2000:344) argues that the conspicuous display of housing features, in particular fashions, by lower and middle income groups in imitation of upper income groups is best 'understood as a strategic form of consumption enabling individuals to

negotiate their position in a group or groups to acquire a position in a society', in which their central aim is to achieve desired peer and public respect and appreciation or perhaps to avoid being ostracised. In Australia, Hamilton (2002: vi) states that 'the desire to emulate the lifestyles of the very rich has led to booming sales of trophy homes....and quality home equipment'. Such a process is more thoroughly explained by the theory of emulation in which,

*The envious lower classes keep copying the upper-class styles, and the upper keep trying to distinguish themselves, so the style for luxuries seeps down (Douglas, 1996: 56).*

It is well established that status-seeking results in distortion in consumption (Binder and Pesaran, 2001), therefore, 'competition to achieve status leads to over-consumption of those goods which confer status' (Ireland, 1998: 99). In support of this line of argument and following their investigation of the contemporary upper middle class American families, Altman and Chemers (1980) had found that the greater majority of these families choose larger homes with more rooms in the house often exceeding household needs<sup>9</sup>, they further explain that;

*Uniqueness is reflected in the specialization of room functions..... In fact, individuality is often symbolized by the sheer number and variety of rooms in the house (Altman and Chemers, 1980: 192).*

A similar experience is reported for the upper middle class Jordanian families (see Abu- Ghazzeh 1997; Malkawi and Al-Qudah, 2003). Even in more primitive social groups, the physical size of dwelling units is often used as a symbol of personal and group status (Jordan and Kaups, 1987; Moughtin, 1985). Among the North African nomadic tribes for instance, the affluent and more influential families own larger and more elaborate tents, thereby reflecting status and personal identity, regardless of their needs or size (Altman and Gauvian, 1981).

---

<sup>9</sup> This practice which was first identified by *Thorstein Veblen* (1899), is known as *conspicuous consumption*, in which individuals and households obtain and ostentatiously display material possessions for the sake of showing or indicating their *prestige* (i.e. wealth, power and status) to others. This type of consumption behaviour 'occurs in both grand and subtle forms' (Johnson, 2003: 59-60). Conspicuous consumption is a social phenomenon that exists and thrives in societies that embrace systems of *prestige ranking* and *social stratification*. See Mason (1981) for a comprehensive coverage of the phenomenon of conspicuous consumption.



### 2.3.4 HOUSING STANDARDS & REGULATIONS

The term '*housing standards*' as used in the literature has a number of different meanings, 'it refers to actual existing situations, stated future goals and various planning rules, policies and regulations' (Karn, 1973: 8). Housing standards also refer to official criteria indicating 'level of excellence' and are measured by housing indicators (Baer, 1977).

Among the key broad housing standards components are housing space, size and occupancy standards, housing structural standards and housing amenities and services standards (Goodchild, 1997). Establishment of housing standards in contemporary planning and housing systems aims to promote safer, healthier and more socially convenient living conditions through the control of housing physical attributes and specifications (Yahya et al, 2001). While the adoption of housing standards may have had positive impact on housing conditions in various countries around the world, there is also a parallel argument against strict adherence to high and sophisticated technical codes and standards (Grigsby and Bourassa, 2003). This is because it has already been proven that higher and more complex housing standards will limit the number of dwelling units and it would make home construction too expensive, therefore, it would hinder provision of basic housing to the urban low and, in some instances even, middle income households (Angel, 2000; World Bank, 1993; Turner 1972).

Housing space and occupancy standards constitute the most basic parts of planning and building codes in most countries with institutionalised physical development systems (Mabogunje, Hardoy and Misra, 1978). The prime objective of most of the housing space standards is to maintain a minimum threshold of acceptable space provided for human habitation and use within dwelling units (Yahya et al., 2001). In Kenya for example, building codes dictate that dwelling units in urban areas of the country must include at least two rooms, a kitchen and a bathroom. They also have to be built of permanent materials (Van Vliet, 1990). Space standards set the regulations for the minimum amount of floor area provided in different types of rooms within dwelling units (Sim, 1993). These specifications include, in some instances, minimum



room widths and height of ceiling. The 1970 National Building Code of India, for instance, did not accept any room with size less than 9.5 square metres as a habitable room and it recommended a minimum height of 2.4 metres and a minimum width of also 2.4 metres for any habitable room (Mabogunje, Hardoy and Misra, 1978).

Housing occupancy standards on the other hand, are normative standards that are developed and adopted by government authorities at different levels in order to ensure that households and members of society have adequate space within their dwelling units, particularly in terms of number of persons per room. Those standards are therefore, concerned with setting the minimum desired standards of persons per room, so as to avoid overcrowding, promote personal privacy, social and moral norms, separate incompatible household activities and encourage the efficient use of housing resources. In some countries they are also used for the provision and management of public housing and the legal enforcement of occupancy regulations (particularly in rental and social housing sectors). Table 2.2 presents an example of the Australian National Occupancy Standards.

**Table 2.2 Australia’s National Standards of Appropriate Housing Occupancy**

1	A maximum of two and a minimum of one person per room.
2	Parents are eligible for a bedroom separate from the children.
3	Household members aged 18 or more are eligible for a separate bedroom unless married or co-habiting as spouse.
4	Dependants aged five or more of the opposite sex do not share a bedroom.

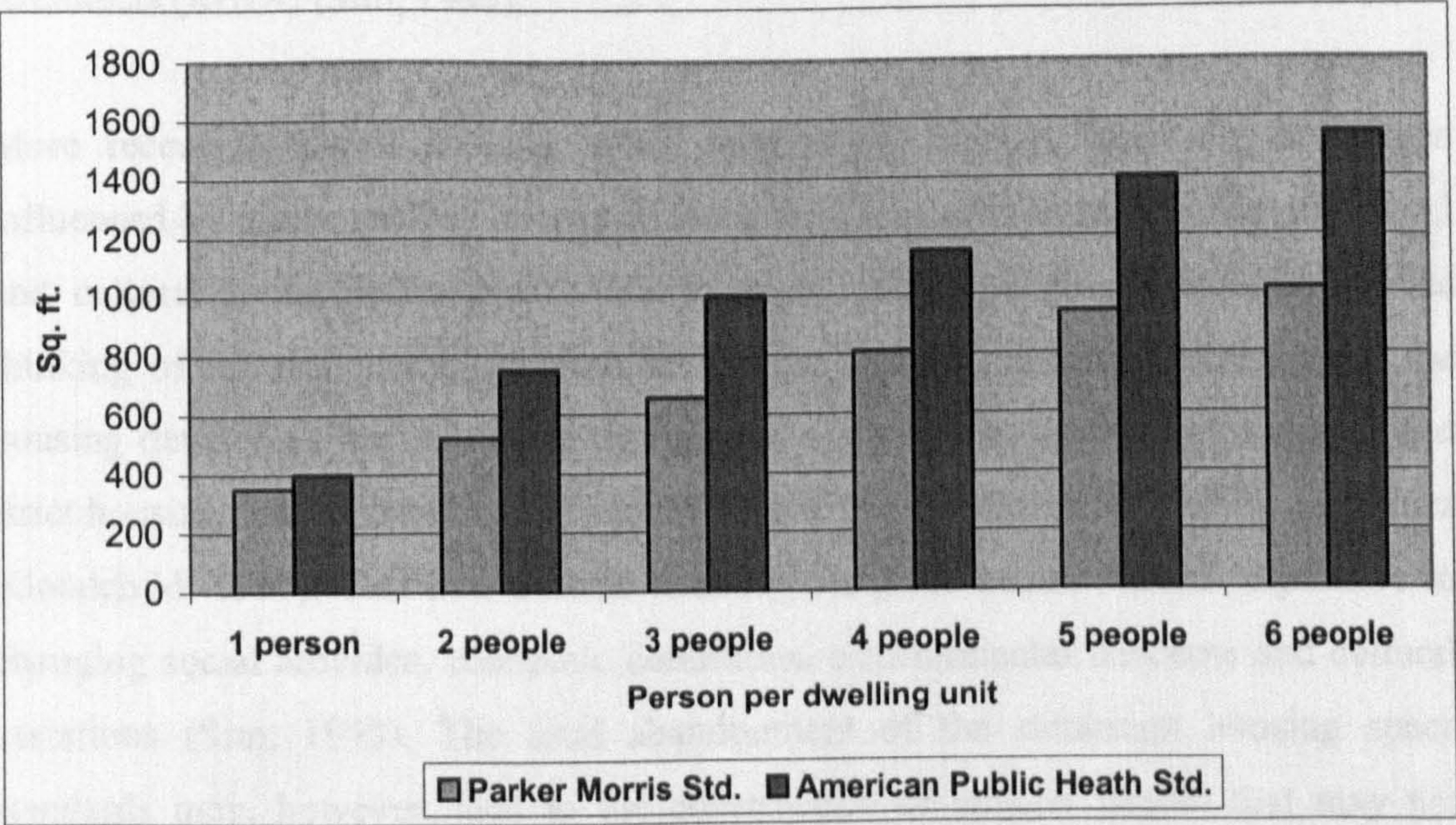
Source: Batten (1999: 145)

In the United States and Great Britain, two landmark reports on housing space and size standards have had considerable impact on the housing space patterns at the time of their inception, particularly within the social and public sector housing (Yahya et al., 2001; Morris and Winter, 1978). These are respectively, the 1950 American Public Health Association Housing Standards (APHA) and the Parker Morris Report of 1961. Both of them provided detailed recommendations on the minimum floor-space required based on the number of occupants in the dwelling units. While the American standards were proposed for both private and public housing sectors, the Parker Morris standards were primarily concerned with state-built social housing



schemes (Goodchild, 1997). The total space requirements for both reports were developed according to household activities and usage of common basic home furniture<sup>10</sup> and appliances. The American space standards clearly included much more generous allocation of per capita space for all sizes of households. See figure 2.3 for comparison. The U.S. report however, failed to provide any precise and specific recommendations on number of rooms required to accommodate households of different sizes, a fact which clearly reflects its interest in function over privacy.

**Figure 2.3 Comparison between the American Public Health Association and the British Parker Morris minimum housing space standards<sup>11</sup>**



For many years after the adoption of the APHA housing space standards in the United States, the US Federal Housing Administration (FHA) based its allocation of public funds and housing subsidies on the condition of applying the APHA housing space standards (Morris and Winter, 1978). Thus any housing project which did not strictly adhere to the recommendations of APHA space standards was denied any housing public funds and federal mortgage insurance subsidies (Morris and Winter, 1978).

<sup>10</sup> Home furniture in terms of its size, type, flexibility, number and arrangement can have a significant impact on the space requirement and general levels of spaciousness within dwelling units. See Akbar, J. (1998) for further elaboration in a Middle Eastern context.

<sup>11</sup> The Parker Morris standards are classified by both number of persons and types of dwelling units (i.e. three storey house, two storey centre terrace, two storey semi or end, maisonette, flat and single storey house), for the purpose of comparison, we have taken the average space requirements for all types of dwelling units.



Similarly, in Saudi Arabia during 1970s and 1980s, the national housing authority required that, in order for a household to be able to receive the full amount of interest-free housing construction loan, it had to build a house that was not less than 3000 square feet in area (Al-Saati, 1989).

Despite being viewed by many housing officials as expensive and too generous, the Parker Morris standards were effectively used in public housing in England and Wales until 1981 and they were then replaced by the 1983 *Homes for the Future- Standards for New Housing Development* prepared by the Royal Institute of British Architects (RIBA) (Sim, 1993).

More recent trends of housing space patterns in the UK however, have been influenced by issues such as energy conservation, cost-effectiveness, changing social and cultural living preferences<sup>12</sup> (Yahya et al., 2001). Such an evolution in the thinking of the responsible governmental organizations, housing designers and the housing developers has led to the decrease of commitment towards prescriptive and strict housing design standards in favour of more flexible design and policy guidelines (Goodchild, 1997). This has allowed housing design to become more responsive to changing social attitudes, economic conditions, environmental concerns and cultural variations (Sim, 1993). The total abandonment of the minimum housing space standards may, however, lead to the construction of smaller homes that may not adequately meet the requirements of targeted households (Goodchild, 1997).

### 2.3.5 LAND AVAILABILITY AND COST

Land, according to Drakakis-Smith (1981: 173) 'is a major item in housing cost... and it is the single most expensive component' among all other components involved in the housing production process. For example, in high growth regions, such as the Western Coast of the United States, land comprised about 40 percent of single household housing cost during the early and mid 1980s (Black and Hoben, 1985).

Increasing costs of land has profound effects on the general supply of housing and the

---

<sup>12</sup> For example, one-person household has become a widely chosen living arrangement in Britain in the last few decades. In year 2000, approximately 32 per cent of all British households were made of one person, from which 16 per cent aged between 16 to 59, indicating the strong tendency of choice of one person household. See HMSO (2001: 10- 17).

overall quantity and quality of housing conditions supplied to various income groups (Doebele, 1987). The lower income segments of the world's urban populations seem to be more severely affected by this problem owing to their inability to meet the high premiums placed on land (Payne, 2001).

High costs of land are the result of several, economic, legal, cultural, political and administrative factors (Payne, 2001). But, it is basically the reflection of a situation where the demand for land exceeds its inelastic supply within the dominant land allocation systems practiced in the country (Drakakis-Smith 1981). Identifying the precise implications of different factors affecting land supply and their exact effects on housing conditions is not a simple matter. This is owing to the high level of complexity and inter-relatedness among the numerous natural and man-made factors working all together and influencing the housing conditions all at once (Zetter, 1984). Having said that, this does not mean that some factors are not more prominent in their effects on the housing conditions.

The relationship between land supply, cost and housing space consumption pattern is explained in a number of different ways. Sullivan and Chen (1997) for example suggest that apartments in Hong Kong have always been small compared to other nations. The main reason for this, they claim, is Hong Kong's history of high-density residential zones, a consequence of the general shortage of developable land in the Territory's small mountainous confines. The World Bank (1993) on the other hand argues that the high cost of housing and the noticeably smaller housing floor area space per person in Hong Kong are the outcome of a combination of unresponsive land and construction policies and regulations adopted by the government.

*Many of the differences in housing outcomes appear to be the result of wide variations in the relative cost of housing, as measured by either rents or housing values. These variations in turn, appear to be heavily influenced by housing policies. For example, urban households in Hong Kong and Athens, Greece, have similar incomes but quite different housing conditions and cost. In 1990, median dwellings in Hong Kong and Athens respectively had 26 and 70 square meters of floor area and were valued at US\$ 112,000 and US\$ 54,000. Differences in costs are attributable to*



*differences in both land and construction cost, both of which are higher in Hong Kong than Athens. These differences, in turn, are the result of both demand and supply factors, but particularly the latter, where a combination of policies regarding land use, zoning, taxes and competition in the building industry have brought about a relatively unresponsive system of land and housing supply in Hong Kong as compared to Athens (Word Bank, 1993:26).*

The effects of planning restrictions of housing land supply on housing conditions in Great Britain for example has been long discussed. It is said to have caused land prices to increase sharply and increased housing densities, thus forcing people to live in smaller homes on smaller plots (Evans 1981). Furthermore, increase in land price in certain regions of the United Kingdom has driven developers to economize on costly land by constructing new housing units that are of lower quality than existing older housing units, in order to satisfy consumer affordability (Cheshire and Sheppard, 1989). In the United States and according to Wentling (1995) the experience has been somewhat different. The increase in the cost of land and urban infrastructure during the 1980s caused an increase of the overall residential densities, but the housing space floor area has been on the rise;

*Rising land costs have had a significant influence on new home design. During the late 1980s, higher land and improvement costs promoted homebuilders to increase densities and introduce a host of new house/lot patterns for single-family detached homes, some of which increased density yields up to about 10 units per acre. while residential lots were becoming smaller, the average interior square footage of houses was increasing. The median square footage of new detached housing continued to rise to 2095 square feet in 1992, up from 1762 square feet in 1987, reflecting the dominance of the affluent, move-up buyers demanding increased square footage. Therefore, we see a trend: builders are constructing larger homes on smaller lots (Wentling, 1995: 8).*

Spatially, the price of residential land generally falls as one moves further away from the central business district (CBD) (Pugh 1980). Therefore, housing density is

reduced and housing space consumption at the periphery is generally greater than the core areas of cities (Zetter, 1984). Access costs are, however, higher owing to their increased distance to employment areas and other major commercial and recreational facilities. The resulting higher transportation costs eventually reduce the rent and price of housing that potential residents would be willing to pay (Bramley, Bartlett and Lambert, 1995).

### **2.3.6 HOUSING UNIT TYPE AND TENURE**

The types of dwelling units seem to have a great impact on the housing space and size. Multi-household housing structures would usually contain smaller units than those found in single-household structures (Clark, Deurloo and Dieleman, 1984). In countries such as the United States, Canada and Australia where single-household detached housing units are the predominant types of housing units, the per capita floor area and average number of rooms in dwelling units are much greater than in most Western and Northern European countries (with the exception of England and Wales), where multi-household apartment blocks are most dominant (Clark, Deurloo and Dieleman, 1984). This is owing to many factors, but most important are those related to housing affordability, land cost, social expectations and land and housing development policies within these countries (Hulchanski 1990).

In addition, rates of housing space consumption are also affected by the type of housing tenure. Information relating housing space to tenure from a number of different countries, clearly reveals a consistent pattern in which the space consumption among homeowners has always been higher than those who rent their units (Clark and Huang, 2003; Huang, 2003; Li, 2000). This is mainly owing to the fact that rental units are in general smaller than owner-occupied. Historically, the average size of dwelling units throughout 1960s and 1970s according to tenure in the United States, for example, clearly shows a significant difference between owner-occupied and rented dwellings;

The median size of all occupied dwellings in the U.S.A. in 1971 was 5.1, but whereas the average for owner-occupied dwellings was 5.7 rooms that of rented dwellings was only 4.1 rooms (Karn, 1973: 16).

In Great Britain, a similar situation was reported by Murie et al (1976) who stated that;

*Most striking are the high proportions of small dwellings in the privately rented sector, and of larger dwellings in the owner-occupied sector. More than sixty percent of privately rented accommodation contains three rooms or less, compared with 14 percent of privately rented and only 2 percent of owner-occupied dwellings. Conversely, 52 percent of owner-occupied dwellings have larger size or more rooms, compared with 8 percent in the privately rented sector (Murie, et. al, 1976: 12).*

Table 2.3 provides more recent comparative statistics on the average housing space for owner-occupied and rental dwelling units within several selected countries. The data clearly indicate that in general owner-occupied units are larger and contain more space than rental units. Differences among the various countries in terms of tenure and average dwelling size are, however, considerable. In the United Kingdom for instance, the owner-occupied units are only bigger by around 15 percent, while in the United States and France the difference reaches between 27 and 30 percent respectively. The difference in Japan, however, is the most visible, where owner-occupied units are almost three times the size of rental units.

**Table 2.3 International comparison of average floor space (in Sq.m) per dwelling unit by tenure<sup>13</sup>**

<i>Country</i>	<i>Owner-occupied</i>	<i>Rental-occupied</i>
United States	159.0	115.7
United Kingdom	81.5	69.7
France	96.1	67.9
Japan	116.8	44.3

*Source: Kanemoto (1997: 616)*

The tenure-based size difference can be attributed to several factors. Rental dwelling units are predominantly located within multi-unit structures which are normally smaller than single-family units (Yahya et al., 2001; Beyer, 1965). The private rental

<sup>13</sup> The United States data is for year (1985) and does not include multi-household units, United Kingdom (1986), France (1984) and Japan (1988). The lack of comparable and more recent data from other countries limits the task of expanding this exercise to other parts of the world. This much data, however, is enough to show a general pattern.



housing developers often attempt to maximize their return on investment by increasing the number of leaseable dwelling units which, in turn, leads to the design and construction of smaller units (Hulchanski 1995). Thus, a smaller difference in size between the two types of tenure in the United Kingdom can be to some extent explained by the fact that a large proportion of rental units were built by the state according to high standards and with somewhat less regard for financial returns than its private sector counterpart. While owner-occupied dwelling units are viewed as more permanent tenure, rental housing is perceived more or less as a temporary condition and, therefore, more acceptable in relationship to space shortage and overcrowding (Clark and Huang, 2003).

### 2.3.7 CONSTRUCTION TECHNOLOGY

Rapoport (1969; 1982) suggests that the difference of housing units across the different societies and cultures is largely tied to the level of technical advancement achieved within these societies. He further states that societies, with respect to their construction technical advancement, can be divided into three distinctive stages:

#### **(1) Primitive:**

This stage refers to the most basic level of home design and construction. It is at this stage that culture and house design and form are so closely associated (Rapoport, 1982). Marc (1977) presents several examples of such housing forms including the Mongolian yurt, the Congolese hut, the Navajo Hogan and the Bedouin black tent among many other forms. There is almost no specialization of construction labour, language and techniques. Such level of simplicity allows almost all society members to become knowledgeable and participate in the housing construction process. Technological limitations also lead to the construction of homes that look the same.

The housing size and space are also limited by constraints set by the available natural building materials. Sanders (1990: 59), while studying the domestic architecture of the Early Bronze Age settlement of Myrtos, Crete, found that;

---



*The absolute dimensions of each room seem determined by available materials (woods and reed lengths) and by the occupant's level of technology (beam and bearing wall structural system) using natural materials found locally.*

Varanda (1982), in his investigation of the traditional Yemeni house design, reveals that room width is conditioned by the maximum length of the tree purlins, varying between 2.0 and 3.5 m. Similarly, Bahammam (1998) indicates that almost all rooms built within traditional pre-oil period dwellings in Saudi Arabia were limited in size owing to short roof spans extracted from indigenous local trees such as palm and mangrove trunks. The width of typical rooms in these traditional homes rarely exceeded 2.5 metres.

### **(2) Pre-industrial Vernacular:**

This stage represents an intermediate level of home construction technology. Although, larger and more diverse numbers and types of homes are built, technology is still constrained by the lack of advanced knowledge of alternative construction methods and solutions. The landmark distinction of this stage compared to the primitive stage is the new role of the “tradesman” who has now become the person in charge of construction. A limited construction specialization of labour is established, though consumers still participate in various stages of the house construction process (Ridley, 1976).

### **(3) Modern Vernacular or Industrial:**

This stage represents the most advanced level of construction technology. It can be found within technologically advanced societies where, there are ‘many specialised building types, each building being an original creation, *designed and built by a team of specialists*’ (Rapoport, 1969: 8). An enormously diversified range of buildings in relation to complexity, size, appearance and functionality are found in societies falling within this stage of technological advancement. According to Altman and Chemers (1980: 160) ‘originality, rather than tradition, playing a central role. This is not to say that tradition is absent or there are no similarities among homes’. The size and overall

form of homes built in the modern vernacular stage of construction is no longer constrained by limitation of construction materials or technical abilities and, as it is clearly expressed by Wentling (1995: 7), nowadays however;

*Lifestyle values are taking precedence over ease of construction. Style is now triumphant over structure.*

Progress made in modern building technologies among many other things, has allowed for increasing the overall size and built up floor-space of all kind of man-made building structures including, of course, housing units. In Saudi Arabia for instance, the introduction of modern construction materials and technologies (*steel and concrete technologies*) to the contemporary housing construction and particularly the ability to build longer roof spans, is believed to have been instrumental in substantially increasing the size of typical rooms and thus dwelling units in the country (Bahammam, 1998).

### 2.3.8 HOME HOSPITALITY

Societies in different parts of the world value home hospitality according to their societal norms which are influenced by a variety of cultural, religious and custom dictates. Within Arab societies, in particular, hospitality has a special meaning. Cultural norms are based on practicing the concept of "*Ikram Al dhaif*" which literally means the honouring of the guest. Because of the special importance placed on receiving and honouring guests and home visitation among relatives, friends and fellow human beings, most homes in the Arab world would include special guest reception room(s), thus adding additional home space and rooms to the household's dwelling unit. In most cases the guest reception rooms would be the largest and most elaborate of rooms in the dwelling unit (Kay and Zandi, 1991). This perhaps is further motivated by the fact that an individual is often judged by the manner in which he would receive his guests (Patai, 2002). In light of this, it has traditionally become increasingly important for an Arab to have a reputation for being hospitable (Al-Fahim, 1996).

Al-Afghani (1990) for instance, found that space in almost all contemporary middle class dwellings in Saudi Arabia is generally divided into two broad categories, the first is household space which comprises the bedrooms and bathrooms, a daily living room, kitchen and perhaps a dining room. The second is guest space comprising of a guestroom, dining room, washroom and bath and sometimes guest bedroom. This guest space is used for hosting guests especially those who are not closely related to the household and particularly *non-mahram*<sup>14</sup> individuals.

Varanda (1982) explains that urban houses in Yemen usually are larger than their rural counterparts. This he asserts is owing to the allocation of special rooms for the reception of guests and visitors, this he claims, is an important element of social life. Furthermore, Mazumdar and Mazumdar (2001: 304) describe wealthy traditional Indian and Persian Muslim homes as;

*In the traditional homes of wealthy Muslim families in both India and Iran, several rooms (known as the birun in Iran and mardana quarter in India) are set aside for the 'public' while the inside of the home remains 'private'.*

## 2.4 THEORETICAL APPROACHES TO HOUSING CONSUMPTION STANDARDS

Yetrehus (2001) critically discussed four basic theoretical principles that can serve as the basis for the formulation of the minimum housing consumption standards, i.e., how societies should regulate their lower limits of consumption of housing space. This discussion of the issue, although it was initially in response to a continuing debate on the problem of housing under-utilization in Norway, does, however, seem to have an international contextual relevance. It could be considered sufficient, therefore, as the basic theoretical foundation for the development of housing space standards in other countries.

---

<sup>14</sup> *Non-mahrams* are male relatives and non-relatives who, according to Islamic teachings, can marry females living or staying in the house. (e.g. every male person excluding, fathers, brothers and uncles). Notice that the *Mahram* and *Non-mahram* separation is based on gender separation in accordance with Islamic teachings.



Discussion of the theoretical approaches to housing space standards has significant ramifications for the present research. The housing provision of the concerned target population group within this study is highly subsidised by the government, this invites a very fundamental question of, *'what must be the philosophical basis upon which governments should regulate housing space consumption under subsidy conditions'?*

The minimum housing space standards are closely related to the "concept of need"<sup>15</sup> (Yetrehus 2001; Spicker, 1987), i.e., the standards must adequately reflect the 'need'- as opposed to the 'want'<sup>16</sup>- of the users of the housing space. The concept of need itself is, however, quite problematic and elusive owing to a number of reasons, most importantly perhaps; first, defining need can be a very subjective matter; second, need is very 'likely to vary through time and place' (Barnett and Lowe, 1990: 184; Spicker, 1987).

The subsequent parts of this section will address in some detail a re-examination of the four distinct and basic theoretical approaches of housing space standard; the functionalist/ normative approach, the market-based approach, the cultural-relativist approach and the universal standard approach. The discussion will also include the philosophical foundations and strengths and shortcomings of each of the theoretical alternative approaches in view of their potential values for application in housing policy proposals.

### 2.4.1 THE FUNCTIONALIST/ NORMATIVE APPROACH

Out of the four theoretical approaches of housing space standards discussed here, the normative/ functionalist approach, is the only one that has emerged strictly out of the

---

<sup>15</sup> Maslow (1954) includes the most basic theoretical hierarchy of human needs. He classifies human needs into five basic levels known as the Maslow's human needs pyramid. (1) The physiological needs (2) Safety and security needs (3) The love and belonging needs (4) The esteem needs (5) The self actualization needs. See Lawrence (1987) for further interpretation of Maslow's hierarchy of needs and its relationship to the field of housing design theory and practice.

<sup>16</sup> In a welfare-based system of distribution of goods and services, 'needs' are given priority over 'wants'. While there seems to be considerable consensus on this general principle, there has always been significant disagreements on what must be considered a need, who qualifies for provision of subsidized need and how much (quantity) would be sufficient to satisfy those needs once they are identified. Though quite important, this discussion is beyond the scope and interest of the current study. For further explanations and insights into this and other related issues see Mishra (1981) and George and Wilding (1976).



architecture and design discipline. The three remaining approaches are all developed in the realm of economic, social and human welfare theory and outside of the influence of the architectural and design doctrine.

In the 1920s the world saw the birth of a new movement in architecture and building design. This movement which originated in France, Germany and the Low Countries and later gained international prominence is known as the functionalist doctrine of architecture (Furbey and Goodchild, 1986).

The functionalist philosophy reflects a very deterministic and normative view of how architecture should respond to design problems and requirements of different kinds of buildings (Yetrehus, 2001; Rowe, 1995). The functionalist doctrine is strictly based on the principle that '*form follows function*', which means that, design must fit most closely with the activities that are undertaken within a building and avoiding unnecessary spatial and decorative elements (Furbey and Goodchild, 1986: 168; Munson, 1959). Such an approach to architecture and design was meant to manifest the contemporary machine and industrial age prevalent in European societies. Buildings were somewhat considered to be like machines in which people would live, work and entertain (Barnett and Lowe, 1990).

In the area of housing design and policy, after the Second World War, functionalist tradition gained considerable dominance in many of the European countries and was later exported to North America and other parts of the world (Pugh, 1980).

The functionalist approach views man's housing needs on purely spatial and physical terms (Rowe, 1995; Yetrehus, 2001). Its underlying assumptions are that human's needs of housing space are exclusively related to the activities that are carried out within housing units and, therefore, once those activities are known, objective and universal space standards can be developed. This is because the assumption is that all people are identical in their use of space and therefore their needs are also similar. It can also be concluded that, 'from this approach one can derive views not only of what may be considered "sufficient" size, but also to the same degree what may be considered "unnecessary" or even "extravagant" housing conditions, in terms of size' (Yetrehus, 2001:167). Furthermore, the proponents of the functionalist tradition

strongly believe that human needs of housing space do not change and are not affected by change in time and place (Munson, 1959).

In order to reach accurate and so called 'scientific' interpretation of human's need and use of housing space, several laboratory-based and field research studies were conducted in a number of European countries and the United States (Munson, 1959). Architects and housing design experts were also called on to develop 'functional analysis' of household activities which were then translated into workable space standards (Munson, 1959).

*Ideas on housing standards have been influenced by the functionalist view of housing, which emerged strongly in the 1930s and by modern attempts to fit housing to way of life. Surveys and time and motion studies examined how areas of the dwelling were used for cooking, laundering and personal hygiene..... Housing amenities have... been researched and the results are incorporated in criteria for spatial dimension, circulation, and equipment (Pugh, 1980: 67).*

The very basic objective of this approach is to provide a functional or 'a good residence with affordable prices' (Yetrehus, 2001:176; Munson, 1959). This has ultimately led to the reduction of housing units to lowest possible sizes, thus promoting a reductionist mentality (Teige, 2002). According to Furbey and Goodchild (1986: 170);

*The first task of functionalist design was to identify the 'minimum house', a simple architectural form which would satisfy most fully, at minimum cost, the basic living requirements of space, air and light.*

The reductionist character of the functionalist approach of housing design complies very much with socialist ideology. In countries where strict forms of socialism are embraced, housing construction is viewed as resource consumption, and every effort is made to reduce the use of scarce resources by minimizing space in housing units and limiting time and money spent on decorative effects and household commodities (Hayden, 1984).

### 2.4.1.1 CRITIQUE

The functionalist approach is flawed with many ideological and practical problems and has received continuing criticism on a number of different counts. Firstly, and most importantly, the functionalist approach to understanding human needs of housing space is exclusively based on rigid objective and biological functions (Yetrehus, 2001; Furbey and Goodchild, 1986). Functionalism to a large extent, disregards the role of human's psychological impulses and socio-cultural values in shaping his needs of housing space and composition (Munson, 1959). Therefore, its lack of consideration for other non-biological variables of human life has made this approach insensitive and unresponsive to the variability and differences of human needs in general and housing needs in particular.

Secondly, the functionalist approach is essentially paternalistic and depends on housing experts and decision-makers to determine what is an adequate standard of housing within a closed and artificially controlled living environment (Barnett and Lowe, 1990; George and Wilding, 1976). It is quite certain that under this approach, standards for housing space are rather influenced by experts' personal views, values and preferences, while the values and preferences of the actual housing users are neutralised.

Thirdly, The reductionist character of the functionalist approach is considered as one of its key weaknesses (Yetrehus, 2001). 'Paying scant regard to the possibility that a home should constitute something more than a functional machine for its occupants', the functionalist approach has failed to reflect the multifarious meaning of housing and its important role for the overall welfare of different households (Furbey and Goodchild, 1986: 170).

Despite the obvious and serious limitations and shortcomings of this approach, many countries around the world still apply the functionalist principles for design and allocation of publicly subsidised housing. This can perhaps be explained in a number of different ways. It can be assumed that the functionalist approach gives governments a convenient tool to sort out basic housing needs and thus, save them the efforts of indulging in lengthy, controversial and complicated exercises of



determining what constitute basic housing needs. Additionally, in third world countries in particular, there is an overwhelming tendency to believe that societal problems must be addressed in a technical and scientific way and free of subjective human judgement. As a result, they find this approach not only adequate as a technical tool, but it is also perceived as a framework that can increase the opportunity for more equitable and fairer allocation of housing resources.

## 2.4.2 THE MARKET-BASED APPROACH

The market-based approach has emerged from the economic theory of free-market capitalism. According to the basic principles of this approach, individual's freedom of consumption of material goods is regarded as an integral element of human sovereignty and liberty. Thus, any attempts to interfere with such freedom must be adequately justified.

*If one abolishes man's freedom to determine his own consumption, one takes all freedoms away (Mises, 1963: 734).*

Furthermore, the market-based approach accepts only market mechanism of demand and supply as the sole means of production, distribution and consumption of goods and services. Individual and household levels of consumption of all sorts of material commodities and non-material services are regulated through the market forces and consumers make their 'rational' decisions in the way that will maximize their individual utility on the basis of their independent and perfect knowledge of market conditions and their ability and willingness to pay for their consumption (Redmond, 2000). Market-based philosophy on consumption entirely rejects what is commonly known as 'objective human needs', it rather sees it as 'irrelevant and paternalistic' (Yetrehus, 2001; Gough and Thomas, 1994). Objective human needs within market ideology are replaced with *subjective consumer preferences* (Walker, 1981), that can and must only be determined according to market rules of demand and supply. Consumer preferences are also said to 'provide both motivation and direction to sellers, such that consumer demand effectively orchestrates supply' (Redmond, 2000: 177). The concept of need in the market-based philosophy is synonymous with the

concept of demand. Hence, it is possible that need will change if income, prices or preferences change (Spicker, 1987).

In countries such the United States, where pure market mechanism dominates economic affairs, a higher level of consumption is regarded as key to economic growth and expanding opportunity for greater prospects for welfare (Brekke et al., 2003). In view of that, Csikszentmihalyi (2002: 271) argues that in the US, 'to buy- even if one does not have the means and has to fall ever deeper in debt- is a patriotic act. To refrain from consuming is antisocial; it is seen as a threat to the community'. Because housing is considered as a prime sector of production, crucial to stimulating the whole economy, sustaining banks and property markets, generating employment, and maximizing consumption of household goods, such as appliances, automobiles and furnishing (Hayden, 1984), it is imperative that market-based systems will always be in favour of higher levels of housing consumption.

### 2.4.2.1 CRITIQUE

The market-based economic theory has been under fierce and continuous criticism. Firstly, its central assumption that all consumers in the market share full and perfect knowledge with respect to available prices, qualities and costs, is not always true (Barr, 1998). According to Hansen and Schrader<sup>17</sup> (1997: 45);

*No consumer is able to make a complete survey of the actual market supply. One can only choose from the goods one knows- and even among those, judgement is limited.*

Hence, lack of critical information on housing options in the market, for instance, increases the risk of making sub-optimal decision by these consumers, with regard to their housing consumption (Walker, 1981).

Secondly, within the market domain, goods and services are produced in the way that they can become most profitable and not necessarily what people most need (Hansen and Schrader, 1997). Thus, consumers must accept what is produced in the market

---

<sup>17</sup> See Hansen and Schrader (1997) for a detailed criticism of the market-based consumption philosophy.

according to the preferences and standards of the suppliers (Barlow and Duncan, 1992). Although, the market-based approach seems more sensitive to varying human needs of housing than the functionalist approach - discussed earlier - it still maintains some paternalistic characters with regard to the housing choices made available to the consumers. Such a phenomenon not only could limit the options of housing consumers but, as argued by Beatley (2000) and Linneman and Megbolugbe (1992), can also cause serious harm with regard to housing affordability, as housing standards and qualities imposed by market suppliers are raised beyond what many households could afford.

Thirdly, applying free-market principles of 'consumer preferences' to publicly subsidised and distributed goods, especially an expensive and durable good such as housing, would prove too costly to meet, particularly when funds are in short supply. Furthermore, it could possibly lead to inequitable allocation of scarce public funds as limited public resources could be used to provide expensive and high quality housing for the very few while failing to meet the minimum needs of the majority. This could easily occur because it becomes extremely difficult to differentiate between genuine 'needs' and desired 'wants' of housing subsidy recipients. Additionally, applying market-oriented consumer preferences to publicly provided housing can also arbitrarily increase public expectations to the point that they may become impossible to meet in the medium and long-term as demand outstrips supply.

Fourthly, a number of critics of the market-based approach have questioned the validity of the concept of consumer rationality in relationship to consumption decisions taken by the consumers in the market (see for instance Douglas and Isherwood, 1996; Bisin and Verdier, 1998). They argue that consumers' preferences are not always formed on rational bases or necessarily always the result of the utility maximization principle of consumption as claimed by proponents of the market-based philosophy (Redmond, 2000; Hirschfeld, 1997; Heiskanen and Pantzar, 1997). One's preferences in the market are often influenced by social and psychological factors present within his or her particular culture or sub-culture (Postlewaite, 1998; Amaldoss and Jain, 2002; Mason, 1981). Bernheim (1994:842) argues that consumption cannot be explained in economic terms alone, when factors such as 'desire for prestige, esteem, popularity or acceptance' all contribute in most if not all of our consumption



decisions in contemporary societies. It has also been established that external social factors are found to have influenced both grand and subtle commodities purchased within the market. According to Postlewaite (1998: 794) 'the house one purchases is obviously endogenous; the choice is to a large extent determined by the social group with which one wishes to associate'.

### 2.4.3 THE CULTURAL-RELATIVIST APPROACH

The cultural-relativist approach of human need interpretation belongs to the social welfare theory. This approach has been discussed as part of an ongoing debate on the delivery and allocation of social welfare services. The cultural-relative approach of need determination, which is also commonly known as the '*comparative need approach*', was earlier identified by Bradshaw (1972), and later investigated more thoroughly by Townsend (1979) as part of his extensive work on poverty in the United Kingdom.

According to this tradition, human needs, including housing needs, must be interpreted within the prevailing social, temporal and cultural context of the relevant society (George and Wilding, 1984). To put it more simply, one's need of housing space must be determined in view of what the rest of society consumes. On poverty, Townsend (1979:31) has argued that;

*Individuals, families and groups in the population can be said to be in poverty when they lack the resources to obtain the types of diet, participate in the activities and have the living conditions and amenities which are customary, or are at least widely encouraged or approved by societies to which they belong. (emphasis added).*

Additionally, he asserts that there is no such thing as static human needs, he goes on to say that;

*The necessities of life are not fixed. They are continuously being adapted and augmented as changes take place in a society and in its products (Townsend, 1979: 17).*

The cultural-relativist approach is essentially driven by its central objective of securing greater *social inclusion and justice for all* (Yetrehus, 2001; Barry, 1999; Clayton, 1985; George and Wilding, 1984). Proponents of this approach are interested in addressing human needs in a way that they can reduce socio-economic gaps among the general population and eliminate social stigmatization (Barry, 1999). It is for this reason that it relies on prevailing current living standards as benchmarks for determining needs and avoids proposing separate and minimum threshold of what can be categorised as absolute and basic needs.

### 2.4.3.1 CRITIQUE

Goodin (1990) proposes that human needs can be relative as well as absolute. His argument is that some needs, such as the amount of calorific intake to sustain the body of a particular person or one's need for sleep, are completely fixed by nature and wholly independent of social context. Goodin's main objection to interpretation of human needs within the cultural-relativist philosophy is with its extreme nature of relativism as contended by Townsend (1979). The notion of socially relative needs involves a great deal of vagueness and some observers have labeled it as '*status need*', rather than basic human need, since the central objective of its need-satisfaction is to achieve social equality, instead of merely satisfying basic needs.

Furthermore, to say that meeting one's needs will always and wholly depend on matching with what others consume, suggests the possibility that some needs may never be met and deprivation could never be eliminated (Sen, 1984; Yetrehus, 2001) because, as Townsend (1979) concludes, necessities of life continuously keep changing. The refusal of this approach to adopt some sort of lower limit threshold of basic human needs has weakened its potential to set specific and practical policy guidelines within the welfare-based provision of goods and services (Yetrehus, 2001).

Additionally, Goodin (1990) and Naussbaum and Sen (1993) argue that there are cases where the prevailing general patterns of consumption are harmful and pose adverse effects on society, as the case may be with low-density residential suburban sprawl for instance. The question then becomes, should governments advocate customary consumption as baselines for basic human needs for the sake of social 'equality', regardless of their negative implications on individuals, households and society at large. On the issue of housing space consumption Goodin posits that;

*If the needs in view are socially relative in the strong sense (so the housing is required merely as a status good) then smaller but more equally sized houses will meet the need better than larger and more variably sized ones (Goodin, 1990: 22)*

#### 2.4.4 UNIVERSAL NEED APPROACH

A number of authors including Naussbaum and Sen (1993) have made attempts to prove that objective, absolute and universal human needs that are independent of individual's preferences and cultural influences do exist in real life. However, Len Doyal and Ian Gough (1991) through their work titled '*A Theory of Human Need*', have proposed an alternative approach that is the most comprehensive and consistent argument for this matter. Their position is that all mankind possesses certain basic needs, indicating the existence of some type of common human condition. They suggest that these basic needs are *health* and *autonomy*, those being the pre-requisites for a meaningful human life, where one can at the least make informed choices, regardless of when in time or where in place that human life is found. These basic needs can, thus, be assumed to represent a universal 'core' through which our peculiar collective and individual identities are shaped. It could be concluded, then, that Doyal and Gough (1991) have 'identified a possible candidate for x that we were looking for: the common denominator that we all share and which marks us out as members of the same (human) group' (Fitzpatrick, 2001: 23). The core argument for their consideration of health and autonomy as being the most basic elements of human needs is that, if those are not being satisfied, then serious *harm* will occur as a result. Their perception of this harm is as follows;



*We define serious harm as fundamental disablement in the pursuit of one's vision of the good. It is not the same as objective feelings like anxiety or unhappiness. Another way of describing such harm is as an impediment to successful social participation. (Gough, 2002: 7)*

Doyal and Gough have also proposed a second-order need which they refer to as '*intermediate needs*', this they claim is crucial to achieving the first-order needs of health and autonomy. For example, we need food and water not for themselves, but to attain our health and avoid serious harm. Additionally, they suggest that these are also universal needs and are not culturally relative or historically relevant in any way. The list of the intermediate needs according to Gough (2002) was derived from two scientific principles, the first is the best available scientific/ technical knowledge articulating causal relationships between physical health or autonomy and other factors. The second is drawn from the comparative anthropological knowledge about practices in the numerous cultures and sub-cultures, states and political systems in the contemporary world. This list of intermediate needs include the following:

- Nutritional food and clean water
- *Protective housing*
- A non-hazardous work environment
- A non-hazardous physical environment
- Safe birth control and child-bearing
- Appropriate health care
- A secure childhood
- Significant primary relationships
- Physical security
- Economic security
- Appropriate education

The successful satisfaction of the range of intermediate human needs identified within the universal need-satisfaction approach requires that appropriate '*indicators*' of intermediate needs (*referred to as minimum optimum*) are developed and continually open to question and improvement, thus benefit from advancement of human knowledge and experience. The underlying assumption of this theory is that

human needs are universal, however, human need satisfiers could vary from one place to another and from time to time. This then means that the universal human needs can be fulfilled in varying ways. For protective housing needs for instance, Doyal and Gough (1991:196-98) suggest three such indicators; (1) structures must protect against normal weather (2) housing must contain safe sanitation facilities (3) *housing must not be over-crowded*.

According to this approach, the satisfaction of the minimum optimum or the lower limit standards will then be considered the satisfaction of basic human needs and any satisfaction exceeding those would be clearly the satisfaction of wants.

The prime objective of the universal need-satisfaction approach is to promote the general welfare of all members of human societies (Gough and Thomas, 1994). This could be achieved, they claim, by making sure that their universal basic needs of health and autonomy are satisfied in accordance with societies' overall social, cultural and political goals. In doing so societies will also be better equipped to measure and conceivably improve their members' well-being.

#### 2.4.4.1 CRITIQUE

King (1996) has strongly opposed the universal need-satisfaction approach. He suggests that, despite the seeming clarity and practicality of Doyal and Gough's theory, there are several deficiencies that could hamper its application in a real life policy environment. He argues that the concept of health (which is one of their two basic human needs), is extremely vague and it is almost 'meaningless'. King (1996:150) questions the 'health' notion on the following grounds;

*What is the criteria that defines whether we are able to act or not? How is this to be determined in practice, and of course, by whom? Are Doyal and Gough suggesting that there are some objective criteria for stating when an individual is able to act? If they are stating that it is merely physical survival that is necessary, in the sense that one is not clinically dead, then it appears to be a sufficient condition that life be maintained by artificial means in an intensive care unit.*

## 2.5 THE HOUSING UNDER-UTILIZATION DISCOURSE

The debate on the adequacy of the levels of housing consumption and their policy implications has focused almost entirely on addressing the minimum acceptable standards of housing space in response to public health and social well-being concerns within the various countries. This focus has emerged as a result of the endemic poor living conditions within major urban areas and particularly for lower income groups. The central aim of housing space and occupancy standards was the alleviation of overcrowding conditions (Goodchild, 1997), which were thought to be the root causes of a number of social, physiological and psychological ills. With tremendous success in achieving improved housing crowding standards, in several affluent western countries such as United States (Baer, 1979; Lane and Feins, 1985), Australia (Batten 1999; Maher, 1995), Great Britain (Glass and Westergaard, 1965; Hole and Pountney, 1971; Barelli, 1992) and Norway (Yetrehus, 2001), within the last few decades, there has been a partial shift of focus from a prevailing situation of housing overcrowding to one of under-utilization. This, however, does not suggest that overcrowding is entirely or permanently eradicated in those countries, as small proportions of low-income households are still having to live in relatively crowded conditions (Lim, Follain and Renaud, 1984).

The housing under-utilization argument, however, has not attracted as much attention as housing over-crowding, for the simple reason that under-utilization is not regarded as an issue of a wide regional or international relevance when compared to overcrowding. It is also assumed that the under-utilization argument is one that is perhaps politically unpopular since, for most politicians, greater housing quality and choice are regarded as sign of economic and social prosperity and therefore political success.

If so, then, why was the argument raised in the first place, what are the bases that determine the conditions of under-utilization and has there been a universal consensus to its meanings, objectives and implications?

The literature on the issue of housing under-utilization as expected is scant and as far as it is known to this researcher, has not been thoroughly reviewed nor comprehensively examined. It is, therefore, useful to begin by examining this



discourse by reviewing the key terminology used and their connotations as applied to the argument.

It has been noticed from the limited number of writings on the issue that the two terms “*under-occupancy*” and “*under-utilization*” of housing space are often used interchangeably and synonymously. It is not clear whether this has resulted from lack of attention in the selection of language describing the subject matter, or it is accepted that technically the two words do really mean the same thing. Whatever the answer may be and whether we accept or reject the duality in use of terminology in this particular context, this deserves some assessment for the purpose of this current study.

According to the Oxford English Dictionary (1993) page 1973, the word *occupancy* is described to be a noun meaning, the action of ‘taking up a place’. While, *utilization* is described in page 3534 of the same source, as a noun meaning the action of making ‘practical and effective use’ of something. Based on the basic dictionary definitions, the two terms seem to have two different connotations. Occupancy as defined refers to the action of taking up a place in this case in dwelling units, though without making any particular reference to the way the dwellings are used. Utilization on the other hand seems to reflect a more precise meaning of practical and actual use of something, which in this case are dwelling units. I suggest that, for the purpose of assessing the rate of housing space use and consumption, it is deemed necessary to use both occupancy and utilization patterns. Occupancy assessment will allow for understanding the conditions pertinent to number and characteristics of households occupying dwelling units in relationship to the number of rooms and housing floor area available in dwelling units. Utilization assessment on the other hand will provide an additional understanding of the actual patterns, intensity and frequency of usage of housing space available to households.

There does not seem to be a universal agreement as to what constitutes a condition of housing under-utilization. Most of the previous writings have argued that under-utilization should be based on the assumption that housing need is strictly related to household size (Batten, 1999). Therefore, the rate of utilization can be determined by relating the number of rooms within a dwelling to the number of household members

occupying that dwelling<sup>18</sup>. As suggested by Baer (1979) and Maher (1995) housing overcrowding and under-utilization must be automatically treated as the converse of each other forming a continuum.

Thus, 'underutilization of a dwelling exists when there is more dwelling space available than is needed by the current occupants of the dwelling' (Maher, 1995:9-10). Baer (1979:222), further argues that, in the United States;

*Traditional standards for crowding in housing have ranged from two or more person per room (ppr) down to 1.01 with only minimal agreement as to the correct standard. A reasonable synthesis of these views would claim that 1.01 to 1.50 ppr was crowding, while 1.51 or more ppr was overcrowding, thereby denoting the appropriate degree of room crowding. But rarely has there been any general discussion of under-crowding save for a limited literature on the elderly and their difficulties in maintaining a large house.*

In response to arguments such as the one proposed above by Bear and Maher, Barelli (1992:17) asserts that, while it is relatively simple to measure occupancy statistically in terms of number of person per room or square metre per person, the harder task she claims is to objectively determine how much 'space is too much' or 'how much is too little'. She goes on to offer three rather convincing reasons to back up her claim;

(1) *'The links between occupancy and well being are poorly understood. It may seem reasonable to assume, for example, that overcrowding is linked to a variety of medical and social problems, but surprisingly little is known about cause and effect. There is no known optimum amount of space per person or per household.*

(2) *What is experienced as overcrowding or underoccupancy by one household may feel just right to another household of the same size and composition.*

---

<sup>18</sup> There is a wide disagreement on what type of rooms should be included in occupancy assessment - all rooms, habitable rooms or only bedrooms. Additionally, should individuals of different genders and age structure be treated as equal in their needs for rooms and space in dwelling units?

(3) *Different societies would answer the question in different ways at different points in time: our own notion of what constitutes crowded living conditions appear to have changed considerably over the last 100 years or so. In 1931 Census, the proportion of households living at more than 1.5 person per room was taken to be an indicator of overcrowding. By 1981, that proportion had fallen from 11.5 per cent to 0.6 per cent, and many researchers had switched to using more than one person per room as an indicator of crowding'. (Barelli, 1992: 17).*

Lane and Feins (1985) were the first to propose a detailed and precise definition of housing space underutilization. They have also applied the person per room thresholds as the basis for the development of such a definition. Their study on elderly housing space consumption in the United States has led to the identification of three levels of housing space under-utilization, they are, (1) *No Underutilization* (2) *Modest Underutilization* (3) *Underutilization*. See table 2.4 for detailed definitions.



Table 2.4 Housing underutilization categories and thresholds

No underutilization	Modest underutilization	Underutilization
Includes units having two or fewer non-sleeping rooms (all rooms, excluding bathrooms) plus one bedroom or fewer for each person within the household. This measure assumes that each person in a household can reasonably utilize one bedroom and that at least two non-sleeping rooms are needed for common household use. Therefore, a one-person household with up to three rooms is not under-utilizing space, nor is a married couple or other two-person households with up to four rooms. (Married couples are treated the same as other two-person households because of possible health problems or disabilities requiring special care or equipment.) Crowded housing units (less than one room per person) are also in this No Underutilization category.	Designates housing units with two non-sleeping rooms and one bedroom <i>more</i> than is required for the size of the household, or more than two non-sleeping rooms and the appropriate number of bedrooms (one bedroom per person). Therefore, an individual living alone in two rooms plus two bedrooms falls into this category, as do married couples with two non-sleeping rooms and three bedrooms.	Consists of units with one extra bedroom for the size of household plus more than two non-sleeping rooms, or two non-sleeping rooms plus more than one extra bedroom. Thus, single-person households with three rooms (e.g. kitchen, living room, dining room) plus two bedrooms or more, couples with three or more rooms plus three bedrooms, and couples with more than three bedrooms are all defined as underutilizing their housing.

Source; adapted from Lane and Feins (1985: 244)

Baer (1979) has indicated that, in 1976, around 15.7 million American dwelling units were under-utilised (i.e. 57 per cent of total housing stock) according to his proposed definition of housing under-crowding, which was based on the threshold of two rooms or more per one person. Similarly, Glass and Westergaard (1965) have stated that there were three million more rooms than people in Greater London. This situation has emerged, they suggest, as a result of nearly 1.2 million households under-occupying their dwelling units.

More recently, however, Barelli (1992) carried out an extensive study on behalf of the UK Department of Environment in which she attempted to assess the extent, causes, implications and possible policy response to the problem of housing underoccupation in the social housing sector in England. The study devised a special methodology for the measurement of underoccupancy and concluded that at least 50 per cent (which equates to two million households) had one or two spare bedrooms. This, however, does not mean that extra rooms in underoccupied homes were not used for other household purposes.

According to Maher (1995), 9.5 per cent of the total housing stock in Melbourne, Australia was considered to be underutilised while 10.3 per cent of the same stock was officially classified as overcrowded. This situation he argues, has emerged as a result of growing mismatch between households and dwellings.

Not everyone, however, has fully accepted the under-utilization argument as it was constructed by Baer, Lane and Feins, Barelli, Maher and the other authors. Batten (1999) for example, has rejected this argument in the context of an Australian housing mismatch discourse. He has based his opposition to the argument on several grounds, most importantly he argues that;

*The problem..... is not that people can or are 'under-utilizing' their dwellings; it is that the decision to use this notion from a statistic is a profoundly normative act, and one in its context of influencing policy that is also anti-democratic..... Housing policy in Australia was long aimed at increasing the housing consumption per household because of planners' concerns for public health and overcrowding. Part of this concern has been to define a threshold where overcrowding no longer occurs, but it does not mean that once the threshold is crossed that households are heading towards over-consumption or under-utilizing their housing (Batten, 1999: 148).*

Nevertheless, he suggests that this argument cannot be applied to publicly subsidised housing 'where there is a clear issue of resources due to limited budgets and stock' (Batten, 1999: 147).

Bramley, Bartlett and Lambert (1995: 3) add an interesting dimension to this debate by arguing that housing 'should be viewed as a multi-dimensional good, in the sense that it provides different kinds of benefits to its users: shelter, warmth, security, hygiene; space for eating, sleeping, working, socializing, storage of goods; status symbol; attachment to a local community'. This, however, makes our attempts to measure actual quantity of housing space consumption or to predict its real value virtually impossible. Housing occupancy statistics drawn from general housing and population censuses do not always provide reliable bases for housing utilization

assessment, since they assume that 'all rooms are alike in size and utility, and that all people are alike in their use of space' (Morris and Winter, 1978: 95). Moreover, housing occupancy statistics are only a snapshot and a single point in time of a rather dynamic and continuously changing household composition and thus living space requirements (Cullingworth, 1979; Barelli, 1992)

The lack of a universally agreed-upon definition of housing space under-utilization and ill-defined means of measuring it have inhibited debate on its ramifications, significance and potential response to it. A clear and concise definition of housing space under-utilization would certainly give more weight to arguments about its impacts.

In the absence of a firm way to define and measure housing space under-utilization, at best it can be defined as a series of characteristics or attributes. Thus, a case of under-utilization requires a physical verification and that its definition has varied in time and space as positions of the observers have differed. As a result, it is not entirely clear what we mean precisely by housing under-utilization. Broadly, it can be described as reflecting one or a combination of the following conditions:

- Low person per room ratio.
- High housing floor-space per person.
- Concentration of mono-functional and highly specialised spaces in dwelling units some of which are rarely used.

What does the under-utilization argument aim to achieve and what justifications are there to support it? As it appears, the housing under-utilization argument aims to raise the awareness among housing policy makers and responsible authorities regarding a range of key issues and concerns associated with the way existing housing stock is utilised. The argument is ultimately tied to the overall conditions of housing policy as they relate to housing production, consumption and management. The motives behind the argument appear to be of economic efficiency and social equity. The points below



summarize the key objectives of this argument as gathered from the various parts of the literature.

- 1- Encourage the efficient use of housing resources. Because housing happens to be the most costly of the consumer durables, it accounts for the largest proportion of private debts and housing is also the largest single asset for any country, making sure that consumers are utilizing these resources optimally is regarded as a vital goal of housing economic efficiency.
- 2- Encourage the efficient use of expensive and in many cases scarce residential land resources. This can be achieved by assigning more economically efficient residential densities for the various types of housing.
- 3- Maintain equity (*particularly horizontal equity*)<sup>19</sup> in governmental housing subsidy resources distribution and allocation, so that scarce public funds are not used to provide too much space for too few, while leaving many others without their basic housing needs being fulfilled.
- 4- Eliminate or reduce the undue economic, financial and social burdens imposed upon the home-owners, i.e., households or individuals, occupying larger homes that exceed their needs may be at hardship due to unbearable demands for cleaning, cooling, heating, managing, furnishing and maintenance costs of owning large homes.
- 5- Improve conditions for the supply of affordable housing to all segments of the population (*more so for low and middle-income households*), by reducing the gap between culturally propagated housing qualities and actual levels of affordability<sup>20</sup>.

---

<sup>19</sup> 'Horizontal equity refers to the relative treatment of population within the same income or wealth strata. Designing the subsidy to be closely targeted and use as small a subsidy as possible (i.e., efficient) helps increase the number of people assisted. Not only does an excessively large subsidy reduce the number of people who can access it, but it also widens the inequality in the treatment of similar people in general' Hoek-Smit et al. (2003:8).

<sup>20</sup> Housing affordability has traditionally only been a concern for low-income households. This however, has changed in recent years, as more middle-income households find it more and more difficult to enter the housing market. See for instance The Joint Center for Housing Studies of Harvard University (2003: 25). See also Linneman and Megbolugbe (1992) and Downs (1992) for further discussion of the relationship between higher housing quality and middle-class affordability problems in the U.S. housing market.

- 6- Eradicate or reduce the '*mal-distribution*' of housing resources in the housing market, i.e., governments should encourage households to avoid occupying housing units that exceed their needs in order to allow for more efficient distribution of housing space among all households<sup>21</sup>.

## 2.6 HOUSING CONSUMPTION AND ADJUSTMENT MODEL

For well over half a century, housing adjustment has become a widely investigated housing issue, particularly in developed industrial societies, but more recently in the developing world. Such interest, has resulted in a considerable amount of literature covering various aspects including, causes of housing adjustment, options, methods, processes, trends, adjustment tendencies and policy implications. Although, this particular review does not wish to examine the details of arguments about these various aspects of housing adjustment, it still remains crucial to examine one factor that is of direct interest to both, this current research study and to the housing adjustment theory. That is of course the role of housing space as a trigger for adjustment and possible households' adjustment options and behaviour.

In very broad terms, housing adjustment can be defined as a process that allows households to eliminate or at least reduce the gap between their actual and preferred levels of housing consumption (Mandic, 2001; Seek, 1983; Rossi, 1980). That is to reach qualitative equilibrium<sup>22</sup> or alternatively get closer to a condition of equilibrium with regard to housing consumption (Goodman, 1976; Morris and Winter, 1978; Littlewood and Munro, 1997). The housing services that are consumed by households,

---

<sup>21</sup> More efficient distribution of housing resources in the market among other things requires from governments to support the establishment of well-functioning housing adjustment options, particularly the option of *residential mobility* which increases opportunities for both the efficient distribution of housing resources and individual's freedom of housing choices. Section 2.5 of this study examines housing adjustment in some detail.

<sup>22</sup> In the context of housing adjustment, the concept of qualitative housing equilibrium is of central importance. According to Deurloo et al (1994) and Doling (1997) the full satisfaction of household's needs and preferences of housing attributes (i.e. space, tenure, neighborhood characteristics, etc..) represents a condition of full housing equilibrium. Conversely, any deviation from those needs and preferences will place the household at a condition of disequilibrium. Thus, it can be concluded from this definition, that households with either less or more quantities of required housing space are at a state of housing space disequilibrium. Housing disequilibrium can be corrected through a process of adjustment. See Figure 2.5 of this study for housing space adjustment model and subsequent discussion.



and are often considered in housing adjustment initiatives, involve a complex and inter-related bundle of attributes that would typically include housing type, tenure, neighborhood qualities, as well as housing space and other physical housing characteristics (Clark and Onaka, 1983; Rossi, 1980).

One of the most frequently cited justifications for housing adjustment (both moving and non-moving) is associated with the household's requirement for space (Clark and Onaka, 1983; Knox and Pinch, 2000). Rossi (1955) for instance, in one of the first ever comprehensive studies on housing mobility that had focused on the City of Philadelphia in the United States, reported that around 25.5 percent of households who were included in his survey had stated that either too much or too little housing space was their primary reason for moving. Many other studies that followed later have also found that housing space plays an important role in adjustment decisions. And 7 to 81 percent of households included in various surveys have mentioned that space was the prime reason to adjust their housing conditions (see for instance, Murie, 1974; Goodman, 1976; Michelson, 1977; Mcleod and Ellis, 1982; Varady, 1983; Clark, Deurloo and Dieleman, 1984; Tipple, 2000; Clark and Huang, 2003; Huang, 2003).

However, Clark and Onaka (1983), argue that while households may appear to adjust their housing consumption for one particular reason, in reality they may be doing so for a host of other reasons. For instance, a household that is experiencing pressures to increase its housing space because of an increase in its size is very likely to also consider adjustment for other factors, such as the desire to own a dwelling or relocate to a more socially compatible neighbourhood or even become more accessible to work or community facilities. Hence, the housing adjustment selection criteria would include all or most of the different variables and will not only aim to correct a single deficiency, which may be space, for instance. This is because housing is an expensive good and, owing to its complex nature, it is unlike other durable commodities in that it cannot be changed or modified as frequently as a household would wish (Seek, 1983).

Despite the numerous models and theoretical explanations of the housing adjustment regimes within different settings, the current literature lacks a conceptual housing



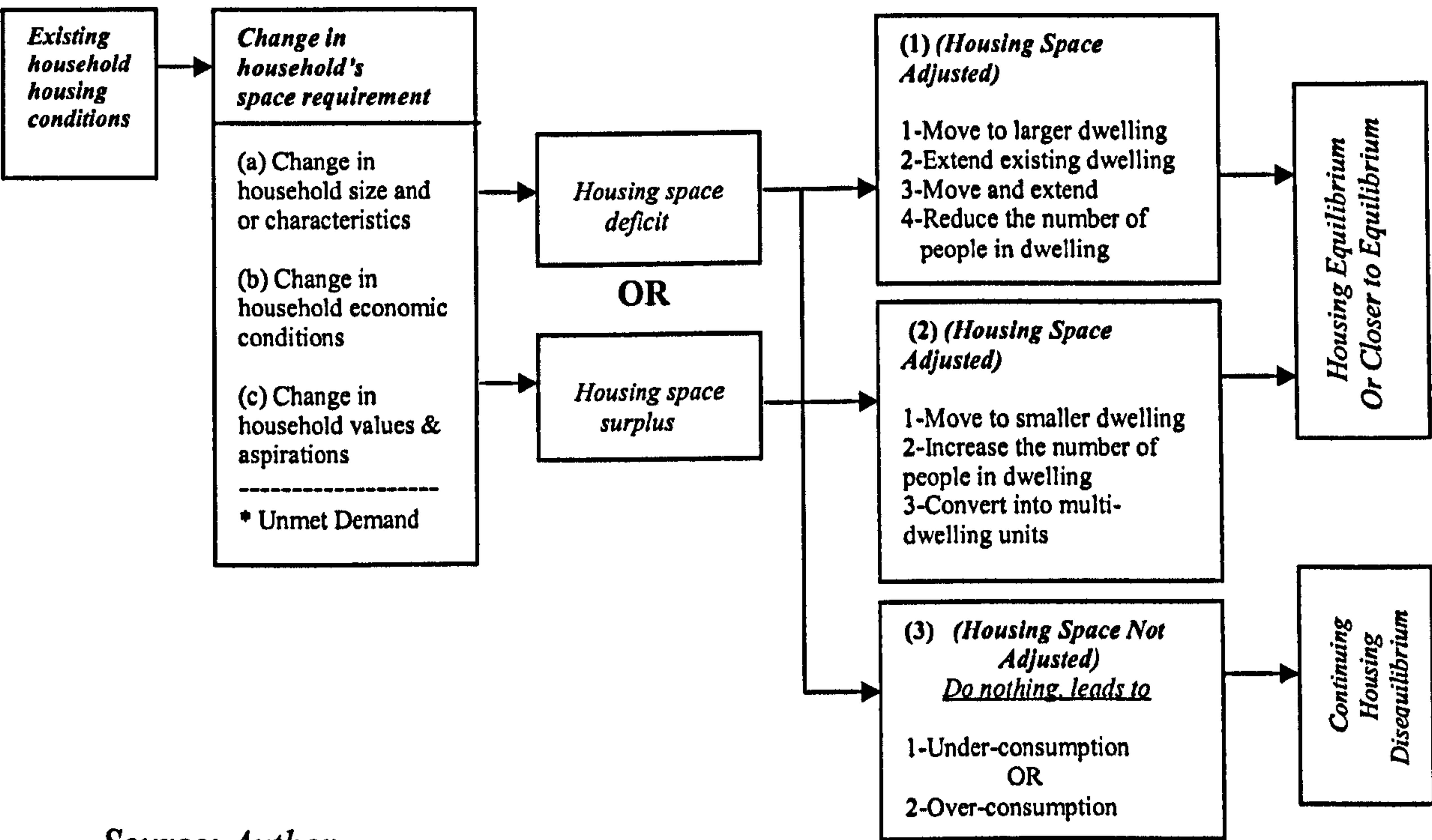
adjustment model<sup>23</sup> that focuses specifically on individual adjustment triggers (i.e., space, neighborhood quality, tenure, etc.) and that also combines the various adjustment alternatives (both moving and non-moving adjustments) into one integrated model. Such a model can help in providing a more precise understanding of the ways that households react to changes in their specific housing requirements within a given community. Additionally, policymakers can be better informed about the overall performance of the housing adjustment environment by identifying specific issues, problems or impediments that may cause avoidable inefficiency or inequity within the housing market process. Examination of housing adjustment behaviour to specific housing requirement, therefore, has considerable value in housing and urban planning and policy proposals as it may help in increasing the efficient use of existing housing stock, increase the supply of affordable housing or even prevent the deterioration and possible blight of neighborhoods (Quercia and Rohe, 1993).

Based on the foregoing review of the literature on housing space consumption and the reasoning for the need for a space-specific and integrated housing consumption and adjustment model, a basic model of household's housing space requirement and adjustment is proposed here and shown in Figure 2.4. The purpose of this model which is wholly based on existing and well-tested housing consumption and adjustment literature, is to augment the separate parts of the literature into a single and unified model.

---

<sup>23</sup> In the context of this study, a conceptual model is defined as 'a set of basic assumptions about the nature of reality and a set of ideas used to describe potential variations among elements of the topic being studied' (Morris and Winter, 1978: 16).

Figure 2.4 A conceptual model of household's housing consumption & adjustment



Source: Author

In housing policy research, households of various types are recognised as the primary housing consuming entity. Therefore, households and their demographic and socio-economic characteristics are fundamentally important to both housing production and consumption processes. Additionally, conditions under which a household exists are dynamic and are subject to major and minor changes throughout the different stages of its life (Clark, Deurloo and Dieleman, 2000). Because the focus of this particular conceptual model is specifically on housing space and possible means of housing adjustment, it begins by identifying the factors that trigger change in household's space requirements. Those factors or triggers of course could imply the need for either more or less housing space, depending on the nature and intensity of the factors, in addition to overall existing household's housing and living conditions (Clark and Onaka, 1983). Two basic factors are identified as part of this model, they are discussed in the following segments.

In virtually all previous studies on housing adjustment, the most frequent single variable that has been associated with change in household's space requirement is

household life cycle<sup>24</sup> (McLeod and Ellis, 1982; Clark, Deurloo and Dieleman, 2000; Rossi, 1980; 1955). The concept of household life cycle is particularly interesting to housing adjustment because it simply implies that as households are formed, dissolved, increase or possibly decrease in their size throughout the different stages of this cycle, their housing space requirements are, therefore, directly affected by those changes in size and composition (Clark, Deurloo and Dieleman, 2000; Cadwallader, 1992; Rossi, 1955). For instance, arrival of children and similarly their permanent departure would have considerable effects on both space requirement (Deane, 1990) as well as the ways in which existing space is utilised. With an increase in the number of children in the household, the likelihood of experiencing 'space deficit' or shortage is expected to be high, particularly, if no space provisions were made prior to their arrival. Conversely, the reduction in household member(s), be it the children or other occupants, is likely to generate a surplus in housing space, particularly if it was not in short supply prior to their departure. As a result of such shifts in size, households are likely to consider dealing with those changing space requirement conditions, but are not necessarily always willing or able to do something about them (Moore, 1986). Additionally, household's space requirement is also altered when children are growing up and they need their own private bedrooms (more so, if from opposite sexes) and perhaps separate space for studying or playing (Tipple, 2000; McLeod and Ellis, 1982). Housing adjustment, particularly in relationship to space requirement is, therefore, 'a demographically driven process' (Clark and Huang, 2003:323).

As it has already been clearly demonstrated in sections 2.3.1 and 2.3.2 of this study, income, wealth and subsidies play important roles in determining the quantity as well as the quality of housing that can be consumed by a household. However, many authors have established that change in income alone and as a single factor does not necessarily exert a direct influence on changing the state of household space requirements (Littlewood and Munro, 1997). On the other hand, a number of empirical studies have found that major increases in households' incomes have resulted in increasing their space consumption, in line with their heightened housing

---

<sup>24</sup> Household life-cycle or otherwise known as life course refers to the basic stages of the life of typical households in a given society. According to Foote et al. (1960), household life-cycle can be divided into five distinctive stages, they are (1) the pre-child period (2) the child-bearing period (3) the child-rearing period (4) the child-launching period (5) the post-child period. Changes in social norms and individual preferences with regard to marriage and formation of households have had significant impact on the traditional concept of family life-cycle.



aspirations and the price of housing space (Rudel, 1987; Weinberg, 1979; Brown, 1975). Conversely, a major drop in income, or increase in housing related expenditures, may also render household's current dwelling unit too expensive. Hence, it may be forced to lower its housing expectations in order to match the declined income or rise in housing cost in relationship to income (Seek, 1983; Weinberg, 1979; Hansen and Gottschalk, 2006). Therefore, adjustment in housing consumption is seen by many consumers as a vital mechanism for dealing with major rises or drops in households' income. Roistacher (1974) has been quoted in Morris and Winter (1978:176) to say;

*Mobility is a means by which families adjust housing consumption to fit altered income status.*

Households that experience changes in their space requirements as a result of any of the above factors are very likely to be left with either of the two following conditions;

(1) *housing space deficit*, a condition in which the number of rooms or the general floor space in a dwelling unit is below the number of rooms or floor-space needed for the household size.

(2) *housing space surplus*, a condition in which the number of rooms or the general floor space in a dwelling unit is in excess of the rooms or floor-space needed for the household size.

Both conditions, however, represent a state of disequilibrium relevant to housing space consumption (Clark and Huang, 2003; Mandic, 2001) and, therefore, would require either upward or downward adjustment in order to correct the perceived deficiencies and reach equilibrium or optimal state of housing space consumption (Mandic, 2001; Megbolugbe, Marks and Schwartz, 1991). The following segments will consider possible adjustment alternatives available to households experiencing housing space disequilibrium.

### ***(1) Adjustment of housing space deficit***

By now, it is well documented that the greater proportions of housing adjustment initiatives recorded in various housing surveys and adjustment studies in many different countries are intended to increase, rather than to decrease housing space consumption (Clark, Duerloo and Dieleman, 2000). There might be a number of different explanations for such a general trend. It is very likely that improvement in overall economic conditions has allowed households to increase their housing consumption over time (Dieleman, 2001; Maher, 1995). Because typically under market conditions, housing is an investment as well as a consumption good, households are, therefore, encouraged to treat it as equity, rather than just a consumable commodity (Lin and Lin, 1999). Perhaps with the help of the expanding private and public housing financing institutions this has caused households to invest more of their resources in housing than other forms of household investment (Gosling, Keogh and Stabler, 1993). Furthermore, several empirical studies, have found that, generally, households are prompt in adjusting their housing consumption upward, but are quite often reluctant to reduce their consumption if they happen to be over-consuming relative to their income and household needs (Dieleman, 2001; Maher, 1995; Morris and Winter, 1978; Goodman, 1976).

In general, there are four distinct alternative methods of increasing household's space consumption. These alternatives are, however, by no means discrete (Littlewood and Munro, 1997) nor are they equally available at all times to every household wishing to adjust its housing space consumption. Household's choices of alternative housing adjustment methods are affected by a number of complex and inter-related factors that are referred to as the sets of preferences and constraints (Wong, 2002; Moore, 1986). They largely relate to economic and psychological costs and benefits of each possible option (Littlewood and Munro, 1997; Edin and Englund, 1991), housing tenure systems (Van Lindert, Van Westen, 1991), housing supply and market conditions (Strassmann, 2001; Van der Vlist, Gorter, Nijkamp and Rietveld, 2001; Wienberg, 1979), the planning and building regulatory systems (Angel, 2000), cultural and social norms (Mandic, 2001), location (Dieleman, 2001), racial and gender discrimination (Clark and Drever, 2000; South and Crowder, 1998), government intervention in the

housing system (Strassmann, 1991), and age and gender of head of household (Ermisch and Jenkins, 1999; Long, 1992) among some others.

*First*; households may consider 'moving' or relocating to larger dwelling units than the ones they currently occupy, in order to make up for the perceived space shortage. This option, which falls under the adjustment category of *residential mobility* is a more dominant form of adjustment in countries with well-developed housing and land markets, such as the United States, Canada and United Kingdom (Mandic, 2001; Strassmann, 1991). Generally speaking, rates of residential mobility are inclined to increase in line with increase in liberalization (i.e. decrease in governmental involvement) of the housing market (Li, 2004; Angel, 2000; World Bank, 1993; Daniell and Struyk, 1997; Strassmann, 1991).

In addition to its direct benefits to consumers in adjusting their housing consumption and liquidating otherwise frozen housing assets, residential mobility is also viewed by many authors as a vital mechanism for achieving '*dynamic equilibrium*' throughout the housing market (Van der Vilst, Gorter, Nijkamp and Rietveld, 2001) thus helping in creating more balanced distribution of housing resources among the consumers.

*The beneficial effects of residential mobility are also recognised ..... where an optimal distribution of households across the housing stock is sought..... residential mobility provides the means for the permanent matching between dwellings and households to be carried out (Mandic, 2001:53).*

A significant number of empirical studies have found that residential mobility is more frequently chosen by renting households, largely because their moving costs<sup>25</sup> are much smaller than home-owning households and, unlike renters homeowners, they have much more freedom in physically altering their current dwelling units in order to meet their changing requirements (Littlewood and Munro, 1997; Varady, 1983; Weinberg, 1979). Additionally, renters are also generally considered to be less attached to their residential surroundings, thus making them more mobile (Moore,



1986; Quercia and Rohe, 1993). Research has also found that households of younger age, higher educational attainment and higher career orientation have higher propensity to move partly because of economic advantages and enhanced access to valuable information about housing opportunities in the market (Dielman, 2001). And unsurprisingly, 'wealthier households in owner-occupied units are more likely to move because they are less likely to be credit-constrained' (Van der Vlist et al. , 2001:3).

*Second*; households may choose to 'extend' or increase their space consumption within their existing dwelling units and without moving to another unit. This traditionally has been achieved through one, or a combination, of the following activities;

- (1) re-divide existing rooms and indoor spaces into more rooms, redistribute room spaces or convert room uses.
- (2) add additional rooms.
- (3) add large scale structures, such as full service residential blocks or another floor.

A few authors, however, have downplayed the role of 'home-improvement' in substantially increasing housing consumption;

*The extent to which the family can alter its consumption of housing services without moving is quite limited (Goodman, 1976:857).*

Despite that, a number of empirical studies have proven the contrary. Housing extension can actually increase housing space considerably.

Tipple (2000), in his monograph on housing transformation, found that housing extension activities, carried out by low-income households in four different developing countries, have resulted in increasing habitable housing space between 60 to 144 percent. Thus, significantly increasing the households' level of housing space consumption compared to their original status (Tipple, 2000).

---

<sup>25</sup> Moving costs include transaction cost, property transfer tax, searching cost, legal fees, removals costs, new furniture cost, etc... Additionally, other non-financial cost include, psychological cost resulting from family life

Empirical research also indicates that households that are highly satisfied with their neighbourhoods or their location in relationship to work-place, schools and other services, but require additional space, are more likely to consider extending their dwelling rather than moving (Quercia and Rohe, 1993).

Gilbert (1999), contends that, in many developing countries, where housing tenure laws and cultural norms place restrictions or impose disincentives on the sales of owner-occupied housing units, 'extension' becomes the most feasible and dominant option for increasing housing consumption. In the case of self-help housing in Bogota, Colombia for instance,

*When a new baby arrives, the only real alternative is to build an extra room (Gilbert, 1999:1085)*

Most importantly, Gilbert (1999) argues that those restrictions often undermine the realization of important benefits attached to owner-occupation tenure. These are, mainly, the treatment of housing as a capital investment that can be traded in an open market as a means for the wider adjustment options.

Similarly, in most traditional and tribal-based housing environments, housing mobility is almost unknown and therefore, adjustment is carried out through incremental extension activities. This is primarily because, in societies where tribal structures dominate socio-political affairs, families feel more socially and economically secure when they continue to live within family compounds and tribal quarters.

*All types of Saudi traditional dwellings, from the Bedouin black tent to the courtyard adobe house, used to be enlarged through an incremental building process as family size increased by marriage or by birth. It has been said that traditional dwellings were never complete when first built (Bahammam, 1998:567).*

**Third;** some households find the combination of both 'moving and extending' to be the most adequate method of matching their purchasing abilities and housing

---

disruption and loss of familiar social surroundings.

preferences with current and future housing space requirements. According to Tipple (2000:26), 'Many extensions are made as part of the moving-in process as a way of reducing immediate costs of moving and spreading the costs over a period'. Littlewood and Munro (1997), within the Scottish context, have found that around 9 percent of households who have moved within a one-year period have undertaken some form of housing extension and refurbishment activities. This clearly indicates that the 'move and improve' strategy could play a significant role in the process of increasing household's space consumption, in addition to its potential benefits of upgrading private housing physical structures.

*Fourth*; if households are unable or unwilling to increase their level of housing space consumption by acquiring additional space through some of the above options, they may choose to undertake household compositional adjustment. That is simply to reduce the number of people living within the dwelling units (Morris and Winter, 1978; Sinai, 2002). Those would typically include grown up children who may be prepared to move out and establish their own independent households (Nguluma, 2003). Such actions could result in freeing-up some of the space for other household members, thus allow for higher levels of space consumption in the household.

## ***(2) Adjustment of housing space surplus***

When households are in situations where their housing consumption is in excess of their needs as a result of either the decline in the number of person(s) living in the dwelling units or major increase in the cost of housing they consume in relationship to their income, households may consider options for reducing their housing consumption. The following discussion presents three broad alternatives of housing adjustments options available to households wishing to reduce their consumption of housing space.

*First*, households have the option of 'moving' or relocating to a smaller size dwelling unit. This adjustment category as explained above is referred to as residential mobility and involves changing residence in order to bring household's consumption of housing closer to equilibrium. Empirical studies on residential mobility carried out in the United States, Britain and Australia.



*Second*, households may consider increasing the number of people in the dwelling unit (Quercia and Rohe, 1993). This may involve either some relatives or arranging for a lodger to share some parts of the dwelling unit in exchange for rent money. Both activities could help in reducing the excess space available within dwelling units (Quercia and Rohe, 1993). Additional benefits of this activity would include increasing the supply of affordable rental housing opportunity by making use of otherwise wasted or under-utilised housing space. Homeowners are also expected to supplement their income by the means of rented rooms (Gilbert, 1999). The few studies conducted on house sharing arrangements in several countries have revealed that most households and primarily for reasons of privacy would not resort to home sharing arrangement except when faced with serious financial difficulties and they are either unable or unwilling to sell their existing dwellings.

*The decision taken by a household to share its housing unit with someone else is more a response to a tight economic position than it is to the fact that the housing unit is larger than the household needs (Ruud and Nordvik, 1999: 195).*

*Third*, a household may also have the option of selling-off part of its dwelling, while keeping part of it for its own consumption. The conversion of existing larger sized dwelling units into two or more smaller and separate units or into lodging (e.g. bed and breakfast) has become widely practiced in countries such as the United Kingdom. This option has a number of advantages, it can benefit the household in lowering its housing space consumption to more efficient levels. It is also expected to generate extra household income through the liquidation of housing asset by the means of sale or lease of converted property. Finally, it helps in supplying additional dwelling units to the market, which in turn may lead to making housing more affordable, particularly for the young and similarly old households, whose space requirements are not so high. The main obstacle to this adjustment option, however, has mostly been attributed to strict and rigid planning regulations. The subdivision of single-household dwelling units into multi-household structures is often regarded by zoning and building codes as a negative venture as it could lead to increasing densities and change of character within existing residential areas (Baer, 1979). Hence, this option has not yet been utilised to its potential capacity.

### ***(3) No housing space adjustment***

In situations where a household experiences change in its housing space requirements and no corrective action is taken in response to those changes, the household remains in a state of disequilibrium with regard to its housing space consumption. Hence, the household is said to be either (1) under-consuming or (2) over-consuming housing space resources in relationship to its *need* of space (Clark and Huang, 2003; Maher, 1995; Lane and Fiens, 1985; Baer, 1979). So, why do households continue to be in states of space disequilibria and what implications do such conditions have for households and the housing sector in general?

The literature on housing consumption and residential choice includes several reasons for continuing housing space disequilibrium within different housing regimes around the world. Those can be categorically classified into two main groups of factors. They are:

#### ***(1) Barriers to residential mobility***

Residential mobility as shown in the above discussion constitutes the largest proportion of housing adjustment initiatives in societies with highly privatised housing markets. In such societies, housing is considered as a private commodity that can be bought and sold in the market in accordance with market rules of demand and supply. Therefore, under market conditions housing is both consumption and investment good <sup>26</sup>. Thus, home ownership allows households to pursue opportunities for capital accumulation and because of that housing has become the greatest part of wealth portfolio for most homeowners in different countries (Arrondel, 2001). On the contrary, housing in some socialist, transition and mixed economies is treated as a welfare benefit (Huang and Clark, 2002) that is designed to only fulfil consumption purposes. Under those conditions, government bodies charged with housing provision and management often place restrictions that legally prohibit the selling of subsidised housing in order to maintain its original objective of providing shelter for the deserving households and to discourage what they perceive as the misuse of publicly-assisted housing by their owners. Restriction is also imposed for a host of other

---

<sup>26</sup> This means that housing in this case has both a use and exchange values.



reasons, for instance it intends to disallow 'part of the benefits transferred to an undeserving third party. This happens when the poor sell out to more affluent households' (Gilbert, 1999: 1075). Legal restriction on the selling of subsidised housing has been either for a specified number of years or indefinitely. Of course, refraining from selling private homes is not always a legally sanctioned matter as in some tradition-based societies, cultural norms severely limit the possibility of selling and buying of existing homes in the private market (See for instance, Tipple, Korboe and Garrod, 1997; Tipple and Korboe, 1995; Amis and Lloyd, 1990; Arimah, 1997).

Empirical and policy research on housing adjustment has shown that households in countries with low residential mobility rates often become stranded in their dwellings for long periods of time or even indefinitely. This in turn, leads to many other unforeseen externalities that could undermine economic efficiency of housing market and hampering individuals' freedom to match their housing needs and aspirations with dwellings of their choice (Angel 2000; Gilbert, 1999; World Bank, 1993).

*Any inability to sell is important in limiting residential flexibility. Because few families maintain the same household structure over the years, most are likely to want to move house at some time or another. Growing families would like a larger house, those with grown-up children may wish to live in a smaller house. People who change their job may want to live closer to their new place of employment. A lack of residential mobility also has wider social consequences: it distorts the supply of housing insofar as small households may be occupying large houses which they do not need, and it increases some people's journey to work (Gilbert, 1999: 1074).*

Furthermore, increasing immobility in the housing sector reduces the rates of the vacancy chain which ultimately clogs the filtering process and increases the possibility for greater mismatch between households and dwelling units (Maher, 1995; Kingsley and Turner, 1993). Immobility also means that almost all additionally required housing units must come from newly built dwellings as existing units are kept out of the supply chain<sup>27</sup>. Such conditions, if not met with rapid housing

---

<sup>27</sup> In countries where residential mobility dominates housing adjustment options, a small proportion of housing demand is met through new housing construction. In the United Kingdom, for instance, an overwhelming 85% of homes bought and sold in a given year is made up of existing dwellings of various sizes, types and locations. See Saunders (1990).



construction programmes, could ultimately lead among other things to doubling-up of households in dwellings, delays in entering the housing market for first time home buyers and reducing the adjustment options for those households wishing either to increase or decrease their housing consumption to non-moving adjustment alternatives (Gilbert, 1999). The inability to sell could also weaken the incentives for homeowners to maintain the physical quality of their homes in a way that it can help to maximize the value of those homes. Thus, such factors could lead to the physical deterioration of the housing environment and rapid depreciation of the national fixed capital assets.

In strategic terms, immobility impedes the long-term efficient functioning of the housing sector (Kingsley and Turner, 1993; World Bank, 1993). Therefore, housing policy will need to address potentials for strengthening the role of housing mobility as part of the housing supply system in the market and within an efficient and equitable framework. This, however, does not suggest that 'very high rates of mobility are always desirable, because they can indeed be indications of breakdown of communities and lack of stability and continuity in the home, school, and neighborhood life of urban families' (Angel: 2000: 309).

International development organizations including the United Nations and the World Bank have adopted recommendations which have been in favour of freeing up the housing market in a way that it can allow for more efficient allocation of housing resources among consumers in the market. The World Bank, for instance, has called for;

*.....making land and house transactions possible .....[because] it encourages the buying and selling of housing and makes it possible for households to move to a dwelling that suits their needs and their budgets. It also increases the choice of tenure available to households, allowing them to own or rent as they see fit ( World Bank, 1993: 117).*

---

## ***(2) Economic and market related factors***

The second bundle of factors that contribute to continuing disequilibrium in the rates of housing space consumption are related to economic and market conditions. Lack of housing affordability, that is households' financial inability to acquire and consume sufficient amount of housing space to meet growing space requirement is the main cause of disequilibrium among low-income households in most countries around the world (World Bank, 1993; Grigsby and Bourassa, 2003).

Furthermore, Megbolugbe, Marks and Schwartz (1991) argue that many middle and upper middle class American households, during the early child bearing stages of their life-course, purchase dwelling units that are intended to satisfy their anticipated long-term space requirement.

*..... most households are in housing consumption dis-equilibrium because of transaction costs. For example, most homeowners have a "larger" than needed house to avoid switching later. (Megbolugbe, Marks and Schwartz, 1991: 389).*

This implies that under such circumstances so many of those households will continue to live in dwellings that exceed their needs for a number of years before they ever reach equilibrium. High transaction costs including transfer taxes are found to be the main factor behind the persistence of this problem. Transaction cost in the US for instance normally exceeds 5 per cent of total sale of dwelling unit (Chan, 2001).

## **2.7 SUMMARY**

This chapter attempted to provide a comprehensive theoretical foundation in line with the study objectives. Discussion began with defining basic terminology and concepts such consumption in its broadest sense and housing consumption as it relates to the context of this research. Basically, housing consumption as it is used in this study it refers to the amount of domestic housing space acquired and used by a given household at a given time. More specifically, housing consumption is measured by relating the size of household and the housing capacity.

Discussion has also covered another important issue which is related to the major factors that determine rates of housing consumption in different settings. Income and wealth are probably the most important factors influencing housing consumption. Higher income and greater access to wealth enable households to obtain and consume greater amount of housing. Conversely, lower income and less affluent households often find it less affordable and lack the necessary means to consume greater amount of housing. Moreover, housing subsidies play a critical role in determining housing consumption. In fact subsidies are often introduced in order to increase housing consumption among certain targeted population groups. However, poorly targeted and excessively generous subsidies often lead to major distortions in the housing consumption pattern within the target population. Housing consumption is also affected by social status and identity factors. Experience has proven that people often consume certain goods and services for more than just the intrinsic utility derived from the consumption process; they rather do that to embellish their social position within their social contexts. Housing is certainly one such good that pays off socially. Other important factors determining housing consumption that are discussed in the chapter include availability and cost of land, housing standards and regulations, housing type and tenure and home hospitality.

There are four basic theoretical philosophies for determining the adequate housing consumption standards. Those include the functionalist or the normative tradition provides a very rigid and deterministic interpretation of housing needs. Its basic assumptions are that housing needs are exclusively related to the activities carried out within housing units, therefore, once those activities are known, objective and universal needs can be identified. The market-based tradition is one that views the concept of basic human needs as irrelevant and paternalistic. Under this approach, demand rather than need must form the bases for determining adequate housing consumption. However, under constrained subsidised conditions such as the one experienced in this study, applying market-based principles will risk spending far too much subsidies on too few while leaving the majority without any assistance. The cultural relativist tradition suggests using the prevailing trends of housing consumption as the bases for determining the adequate housing consumption standard. The central aim is to enhance social inclusion and justice. Nevertheless, the argument against this tradition is that what if the prevailing trends involve harmful



outcome on both individuals and society at large. The universal need tradition provides the most realistic bases for determining housing consumption standard under subsidy condition. Proponents of this tradition argue that standards for adequate housing consumption must satisfy a socially acceptable crowding standard that will promote the wellbeing of the housing consumers.

Housing under-utilization is a concept that has not been widely researched due to its limited occurrence. This chapter has attempted to establish a workable definition of this condition. Housing is under-utilised when there are low person per room ratios, high housing floor-space per person and there are mono-functional and highly specialised spaces that are rarely used.

Household's housing space needs vary throughout the life-cycle of different households. Growing households would often need larger dwellings while those with grown up children may seek smaller dwellings. Adjustment of housing consumption take a number of different forms. The most flexible is housing mobility by which households modify their consumption and allow a more efficient matching between households and dwelling size in the market. Another way to increase housing consumption is through extension of existing dwellings. On the other hand, Immobility is a major source of mismatch between households and dwellings units.

# **Chapter 3:**

## **RESEARCH DESIGN AND METHODOLOGY**

### **3.1 INTRODUCTION**

The development and implementation of a sound, coherent and well-integrated research strategy is an essential prerequisite for the successful execution of any research study (De Vaus, 2001). This chapter attempts to explain the study design, methodological approach, investigation instruments and research procedures adopted in the study. It also provides the justifications for the selection and application of the chosen research methodological tools and the way that they are utilised in response to the different research aims and questions articulated in chapter one.

In specific terms, the chapter dwells thoroughly on the overall structure of data collection methods and sources, methods of data analysis and manipulation and the major research limitations and constraints experienced in the course of conducting the study.

### **3.2 RESEARCH DESIGN AND METHODOLOGY**

The selection of a research design and methodology for any study depends on several factors including research objectives and complexity, availability of existing data and resources (Robson, 2002). Traditionally, research studies in the social sciences have utilised either qualitative or quantitative methods of data collection. Quantitative research methods 'involves the use of methodological techniques that represents the human experience in numerical categories, sometimes referred to as statistics' (Marvasti, 2004:7). However, critics of this approach often highlighted its inability to allow researchers to make full and accurate sense of human and social action within their wider contexts (Silverman, 2003). Qualitative research methods on the other hand and as explained by De Vaus (2002:5) are often 'regarded as providing rich data about real life people and situations and being more able to make sense of behaviour and to understand behaviour within its wider context'. Nevertheless, qualitative research has been consistently criticised for its lack of generalisability, being highly influenced by the subjective interpretation of the researcher and inability to replicate by other subsequent investigators (De Vaus, 2002). The preceding discussion has shown that each method has its strengths and weaknesses when applied individually.



Understanding the factors causing the surge in rates of housing consumption among contemporary middle-class homeowners in Dubai and identifying various policy implications associated with such a phenomena require substantial and thorough amount of various types of data. Due to limited amount of existing information on the topic and to overcome the drawbacks of the two individual methods (i.e., the quantitative and qualitative) of data collection and to capitalize on the their individual strengths this study uses a mixed method approach of data collection.

*A mixed methods design is useful to capture the best of both quantitative and qualitative approaches..... researchers may first survey a large number of individuals, then follow up with a few of them to obtain their specific language and voices about the topic. In these situations the advantages of collecting both closed-ended quantitative data and open-ended qualitative data prove advantageous to best understand a research problem (Creswell, 2003: 22).*

As shown in table 3.1 data collection strategy adopted for this research uses six different major methods of data collection, namely structured sample interviews, semi-structured interviews, samples of dwelling unit floor plans, field/ site observation, secondary data and reports, media archives. Each of the six methods is linked to specific research inquiry topic, primarily because it was not possible to answer to all questions by utilizing a single method. Within the overall research design, data collection methods are either *primary* or *supplementary* depending on the overall contribution of each method in responding to various inquiry topics. The rest of this chapter will explain in some detail the nature and specific contribution of each method of data collection.



Table 3.2 The general structure of the mixed method approach

	Primary Data	Secondary Data
Quantitative	Structured Sample Survey	Housing Unit Floor Plans
		Statistical Reports
Qualitative	Semi-Structured Interviews	Media Archives
	Field/ Site Observation	Documents/ Reports

Table 3.2 presents a summary of the structure of the mixed method research methodology adopted for this study. The combination of both quantitative and qualitative methods of data collection from primary and secondary sources are utilised concurrently.

In this study, the data collection efforts were divided into two stages. The first stage which focused primarily on the fieldwork associated with the structured interview surveys, site/ field observations and collection of data from secondary sources was conducted between August and November 2003. The second stage of the fieldwork was conducted between September and December 2004 and focused on the semi-structured interviews, collection of floor plan samples and to fill some of the gaps from the previous stage.



Table 3.1 Summary of research inquiry and methods of data collection

Research Inquiry Topics	Methods/ Instruments of Investigation					
	Structured Interviews	Semi-Structured Interviews	Dwelling Units Floor-Plans	Field/ Site Observation	Secondary Data & Documents	Media Archives
Housing development process		P			S	S
Specific stakeholders' roles		P			S	
Historical change of dwellings	P	P	P	S	S	S
Factors behind dwelling size increase	P	P			S	S
Housing policy & standards		P			P	P
Cost of housing consumption	P	P	S	S	S	S
Housing preferences and attitude	P	P		S	S	S
Dwelling space utilization	P	S	S	P	S	
Future policy direction	P	P			S	P

P indicating that the method is *primary*  
S indicating that the method is *supplementary*



### **3.3 THE STRUCTURED INTERVIEW SAMPLE SURVEY**

This study is led by a number key objectives which include but not limited to the following:

- 1- assess the current rates of housing consumption by study population and its sub-groups.
- 2- examination of factors that had led to increase of size of contemporary dwellings and housing consumption among study population.
- 3- assess the general patterns of housing utilization among the study population.
- 4- discuss the preferences and attitudes of study population in relationship to their housing conditions.
- 5- discuss the most important policy implications in association with current patterns of housing consumption.

To be able effectively to achieve the main elements of the study objectives and generate adequate answers to some of the key research questions posed in chapter one, the structured interview sample survey method of data collection was selected and applied as the primary and most appropriate instrument of investigation. As Creswell (2003) explains;

*'..... If the problem is identifying factors that influence an outcome, the utility of an intervention, or understanding the best predictors of outcomes, then a quantitative approach is best. It is also the best approach to use to test a theory or explanation'. (pp. 21-22. emphasis added).*

Conceptually, the purpose of the structured sample survey is to collect standardised information from a certain number of individual sampling units in a specified population in order to generalize the outcomes from the selected sample units to the larger population from which the sample is chosen (Schofield, 1998). This was particularly very crucial for this study as it needed to identify the specific characteristics of the study population sub-groups and their housing conditions and preferences. Moreover, testing a relationship and its strength between dependent and independent variables relevant to specific population sets can be more efficiently and

reliably handled through quantitative structured sample survey method compared to more open ended and qualitative approaches (Collis and Hussey, 2003).

The application of the structured sample survey method always requires the development and use of tailor-made survey schedules, otherwise known as questionnaires, 'in which the questions, their wording, and their sequence are fixed and are identical for every respondent' (Nachmias and Nachmias, 1992: 224). Following such strict standardization procedures in the preparation of survey questionnaires is intended to guarantee that;

*.... any variations between responses can be attributed to the actual difference between the respondents and not to variations in the interview. (Nachmias and Nachmias, 1992: 224).*

Because of the multi-faceted nature of the study and the diversified contents of the research questions, it was deemed necessary for this study to employ two structured sample survey schedules: the owner-occupant survey and the owner-to-be survey. Each survey intended to generate different information. The exact definition, purpose and intent of each of the two surveys are discussed in the next two sub-sections.

The preparation of each of the two questionnaires involved three drafts and were prepared and reviewed under the direct guidance of Dr. Graham Tipple, the academic supervisor of the researcher. The original version of both questionnaires were written in English. However, once finalised and approved, the researcher translated the exact contents of both questionnaires into Arabic. The translated Arabic draft version of the questionnaires were then reviewed and some wording improvements were suggested by a volunteer bi-lingual Dubai-based professor of sociology who had extensive experience in designing and applying survey questionnaires in the local community.

### 3.3.1 THE OWNER-OCCUPANT SCHEDULE

#### *Definition of Owner-occupants:*

Include those middle-income heads of households who have acquired their dwelling units using a government-provided interest-free housing loan from either the PHPS or the SZHP and who at the time of the survey were living in their dwellings.

The owner-occupants structured schedule (Appendix 1) was designed to capture information on three main blocks of inquiry. See table 3.3 for a summary of inquiry purposes.

#### **1- Socioeconomic characteristics**

The schedule provided the template for collection of information on basic socioeconomic attributes of those who received interest-free loans, built their dwellings and *had the experience of living in the dwelling*. Basic socioeconomic data include, the age, gender, household disposable income, size of households and number of households staying in dwelling.

#### **2- Housing characteristics and conditions**

The schedule also aimed to identify basic housing conditions and characteristics of the owner-occupant population. Data captured include, sizes of contemporary dwellings, number and types of rooms, types of dwelling, rates of housing consumption by each sub-group, previous housing tenure, cost of housing construction and sources of construction financing.

#### **3- Preferences, attitudes, housing utilization patterns and policy implications**

The owner-occupant schedule intended to capture the preferences and attitudes of homeowners towards their current situation. The aim was to elicit answers which can help in understanding the various implications of current housing consumption trends, their housing adjustment preferences and their willingness to accept the ready-made dwelling option as an alternative to their custom-built dwellings.



**Table 3.3 The owner-occupant survey inquiry and purpose**

Inquiry Category	Purpose of Inquiry
Socioeconomic characteristics	To identify: 1- age and gender of current homeowners. 2- total household disposable income. 3- household size. 4- number of households in dwelling. 5- length of stay in current dwelling.
Dwelling characteristics/ conditions	To identify: 1- size of dwellings used by study subjects. 2- number and types of rooms-spaces- in contemporary dwellings. 3- rates of housing consumption per capita and income sub-groups. 4- number of floors and services blocks. 5- previous housing tenure. 6- sources and amounts of housing construction financing. 7- Type of dwelling.
Preferences, attitude, housing utilization and policy implications	To identify and study: 1- cost implications of current housing consumption. 2- existing patterns of housing space utilization 3- housing adjustment preferences 4- willingness to accept a ready-made dwelling as an alternative to custom-made dwelling option.

**3.3.2 THE OWNER-TO-BE SCHEDULE**

*Definition of Owners-to-be:*

Includes those middle-income individuals who were granted an interest-free housing loan from either the PHFS or SZHP and at the time of the survey were having their dwelling units under-construction and have not yet moved into their dwellings.

The owner-to-be structured schedule (**Appendix 2**) was designed to capture information on three main blocks of inquiry. See table 3.4 for a summary of inquiry purposes.

**1- Socioeconomic characteristics**

The schedule provided the template for collection of information on basic socioeconomic attributes of those who received interest-free loans and have *recently gone through the design process of their dwellings*. Basic socioeconomic data include, the age, gender, household disposable income, size of households and number of households intended to stay in dwelling.



**2- Housing characteristics and conditions**

The schedule also aimed to identify basic housing conditions and characteristics of the owner-to-be population. Data captured include, sizes of designed dwellings, number and types of rooms, types of dwelling, rates of housing consumption by each sub-group, previous housing tenure, cost of housing construction and sources of construction financing.

**3- Housing design preferences/ knowledge and influences**

The owner-to-be schedule intended to capture the preferences, attitudes and housing design knowledge and experiences of prospective homeowners. The aim was to elicit answers which can help in understanding the attitude toward housing construction budgeting and planning, impact of housing loan subsidies and social influences on dwelling size, consideration of post-construction operation and maintenance costs and preferences for building in stages or at once.

**Table 3.4 The owner-to-be survey inquiry and purpose**

<b>Inquiry Category</b>	<b>Purpose of Inquiry</b>
Socioeconomic characteristics	To identify: 1- age and gender of current homeowners. 2- total household disposable income. 3- household size. 4- number of households in dwelling.
Dwelling characteristics	To identify: 1- size of dwellings planned by study subjects. 2- number and types of rooms-spaces- in contemporary dwellings. 3- rates of housing consumption per capita and income sub-groups. 4- number of floors and service blocks. 5- previous housing tenure. 6- sources and amount of housing construction financing. 7- Type of dwelling.
Housing design preferences/ knowledge and influences	To identify and study: 1-housing construction budgeting plans. 2- implications of housing loan subsidies on dwelling size. 3- implications of social influence on dwelling size. 4- consideration of housing operation and maintenance cost during design stage. 5- preferences of building dwelling in stages or at once.



3.4 THE SAMPLING PROCEDURES

Both the PHFS and SZHP were approached several times by the researcher and asked for a list of the names and contacting addresses of individuals who have been granted governmental interest-free housing loans so that a comprehensive and valid *sampling frame* could be generated for the purpose of adopting a *probability random sampling procedure*. Despite all assurances presented by the researcher, both institutions consistently declined the requests on the basis of their fear of violating the privacy of individual loan receivers. Moreover, the researcher believes that because as discussed in chapter three, the loan approval decisions are not based on clear and objective set of criteria and are highly influenced by widespread practices of nepotism and favouritism, the responsible institutions were somewhat suspicious about the intentions of the researcher and, therefore, decided to avoid risking their position by not disclosing the list of names. The refusal of the two housing loan institutions (i.e., the PHFS and SZHP) to supply the researcher with the list of names which make up the study population, meant that unfortunately no sampling frame could be established and as a result no probability sample that would provide the most representative results could be drawn.

Nevertheless, the two institutions were more understanding and cooperative when asked by the researcher to provide data on the number of individuals who were granted loans by income group and housing status i.e., owner-occupant and owner-to-be. The supply of this kind of data took more than three weeks because the database structure problems and preoccupation of staff with other internal works. To avoid further delays and possible bureaucratic complications, the informants within the two institutions accepted to furnish the data through informal channels.

Table 3.5 The distribution of owner-occupant population by income category

	Low-Middle	Mid-Middle	High-Middle	Total
PHFS*	762	2,031	381	3,174
SZHP**	90	240	45	375
Total	852	2,271	426	3,549

Source: The Private Housing Finance Scheme and the Sheikh Zayed Housing Programme (October, 2003).

\* Private Housing Finance Scheme

\*\* Sheikh Zayed Housing Programme



Table 3.5 includes the statistical distribution of number of owner-occupant loan receivers by income sub-group and the loan providing institutions. The data was provided by the end of October 2003. In total there were 3,549 owner-occupant sample units to choose from. About two-thirds (64%) were made up of Mid-Middle households. Nearly a quarter (24%) came from the Low-Middle households and only 12 per cent composed of High-Middle Households. The vast majority (89.4%) of the owner-occupants were those who received their loans from the PHFS. This can be explained by the fact that the PHFS programme is much older and better resourced than the SZHP.

**Table 3.6 The distribution of owner-to-be population by income category**

	Low-Middle	Mid-Middle	High-Middle	Total
PHFS*	408	905	146	1,459
SZHP**	245	542	87	874
Total	653	1,447	233	2,333

*Source: The Private Housing Finance Scheme and the Sheikh Zayed Housing Programme (October, 2003).*

\* Private Housing Finance Scheme

\*\* Sheikh Zayed Housing Programme

Table 3.6 shows the distribution of the owner-to-be loan receivers by income sub-group and loan institution. Overall, in this category there were 2,333 sample units to select from. In general, the percentage distribution of this population category was not very different from that of the owner-occupants where 62 per cent were made of the Mid-Middle sub-group. 28 per cent came from the Low-Middle and only 10 per cent comprised of the Low-Middle segment. Unlike the owner-occupant households, only 62.5 per cent were those who received their loans from the PHFS, while 37.5 per cent were from the SZHP.

### **3.4.1 QUOTA SAMPLING (non-probability, proportional and stratified sampling procedure)**

It was clarified in the previous section that despite the existence of a full sampling frame of the study population with the two housing loan agencies, the researcher was prevented access to them. Lack of a sampling frame has made the adoption of any form of random probability sampling approach absolutely impossible in this study. Thus, the only option available to the researcher was to choose the most appropriate

approach from the various types of non-probability sampling methods. The four classical types of non-probabilistic sampling methods, namely Convenience (haphazard) Sampling, Purposive (judgmental) Sampling, Quota (stratified) Sampling and Snowball Sampling were thoroughly evaluated for the purpose of choosing the most appropriate one for this study.

As a result of this evaluation, the researcher reached a decision to choose the quota sampling method because of the advantages it provides against the other methods. Firstly, this study is concerned with the issue of housing consumption within the three middle-class sub-groups and because income and social grade are reasonably good discriminator of consumption behaviour, it was, therefore, crucial to adopt a sampling method that would offer non-overlapping results pertinent to each study sub-group. Secondly, quota sampling is the only method that can guarantee fair and proportionate representation of each study sub-group (Levy and Lemeshow, 1999). To increase the quality of survey results, the researcher adopted a strict sampling procedure in which the number and category of respondents were selected according to their proportion in the entire population.

Moreover, in an effort to reduce the possible effect of bias representation in the sample, the researcher applied certain precautions such as avoiding interviewing his relatives, friends and any person whom he knew previously. The researcher also believes that, he was highly successful in gaining the trust of the informants because they realised that he was independent and had no connection with any of the loan providing government institutions. This assurance was very crucial in allowing the informants to express their preferences and attitude more frankly and freely on sensitive issues as there was no fear of reporting each individual case to a third party i.e., any of the housing loan institutions.

### **3.4.2 SAMPLE SIZE**

A sample is a subset of sampling units which are generated from a known population. The purpose of using sampling in survey research is to estimate population parameters from the selected sample. In other words, researchers use samples to draw generalised estimates about the larger population being studied. On the other hand, the size of a

sample in any survey research ‘depends on the purpose of the study, design, data collection methods, and type of population available for ‘the research problem’ (Adams and Schvaneveldt, 1985: 184). Moreover, for an interview survey approach such as in the case of this research, cost and time spent on data collection are the two most important factors in determining the overall sample size (Levy and Lemeshow, 1999). Bryman (2001) and Blaikie (2003) explain that when dealing with homogenous populations such as those who come from similar income or social groups where the expected degree of in-group variation is low, smaller sample size can have the same effect as larger sample size used in more heterogeneous populations. This is even more accurate when a structured sample survey method is supported and cross-checked by other supplementary methods of data collection such as qualitative interviews and observation (Bryman and Cramer, 1990). Below is a discussion of the sample size and selection criteria for both owner-occupant and owner-to-be populations.

**Table 3.7 The sample size of owner-occupant population by income subgroup**

Income Sub-Groups	PHFS* N	SZHP** N	Total N	% of total in each stratum	Sample size (n)	Sampling fraction
Low-Middle	762	90	852	24	48	1/18
Mid-Middle	2031	240	2271	64	128	1/18
High-Middle	381	45	426	12	24	1/18
Total	3174	375	3549	100	200	1/18

*Fieldwork, 2003-2004*

Table 3.7 shows a summary of sample sizes for each population sub-group of owner-occupants. Data provided by the PHFS and the SZHP prior to the launching of the structured sample survey, indicated that there were 3,549 households in the owner-occupant group. Because of limitation of both time and resources available to the researcher, a total sample size of 200 owner-occupants was determined. Such sample size provides a sampling fraction of 1/18 which means that one in every eighteen actual owner-occupant was selected for the interview. The distribution of the two hundred sampling units was proportionate to the absolute size of population in each income sub-group i.e., Low, Mid and High-Middle segments of this population. This procedure provides the benefit of ensuring opportunities for equal representation for all population sub-groups.



Table 3.8 The sample size of owner-to-be population by income subgroup

Income Sub-Groups	PHFS* N	SZHP** N	Total N	% of total in each stratum	Sample Size (n)	Sampling fraction
Low-Middle	408	245	653	28	42	1/16
Mid-Middle	905	542	1447	62	93	1/16
High-Middle	146	87	233	10	15	1/16
Total	1459	874	2333	100	150	1/16

\* Private Housing Finance Scheme  
\*\* Sheikh Zayed Housing Programme

Similarly, table 3.8 summarizes the sample size and distribution for the owner-to-be population. Information provided by the PHFS and the SZHP revealed that a total of 2,333 individuals fall under the definition of the owner-to-be. A sample size of 150 was determined for this survey group. Practically, this size of sample gave a sampling fraction of 1/16 which concludes that one in every sixteen owner-to-be individuals was selected for the interview. Here again, the distribution of sample size was proportionate to the absolute size of each sub-group.

Table 3.9 Summary of the overall population and sample

Study Pop.	N	%	Owner-Occupants Sample (n)	%	Owner-To-Be Sample (n)	%	Both Respondent Samples (n)	%
PHFS*	4633	78.8	178	89	95	63.3	273	78
SZHP**	1249	21.2	22	11	55	36.7	77	22
Total	5882	100	200	100	150	100	350	100

\* Private Housing Finance Scheme  
\*\* Sheikh Zayed Housing Programme

In sum, and as shown in table 3.9, this study has included a total of 350 sample cases for both survey groups. With the general population for the two populations reaching 5,882, the overall sampling fraction for the entire sample survey interviews was 1/17.

3.5 WHY DUBAI EMIRATE?

This study is concerned with the issue of housing consumption among middle-class citizens in Dubai Emirate, specifically those who have received subsidised

governmental interest-free loans. Dubai was selected as the place of this study primarily because the researcher is from Dubai and he is familiar with its housing and urban development issues. He had also served for more than a decade in the local Planning Department, this proved very beneficial especially for securing better and faster access to existing reports, statistics, relevant laws and semi-structured interviews with key stakeholders in various governmental and private institutions<sup>28</sup>.

Although this study has focused on one Emirate, the researcher firmly believes that most of the major findings of this study are highly applicable to other emirates because,

- 1- Despite some variations in the overall income per capita levels among different Emirates, there are no substantial differences in household income within middle class segments of the national population. Moreover, all of the middle class population enjoy high rates of subsidy from both local and federal governments.
- 2- Interest free housing loans similar to the one applicable to this study population are also provided to middle class households in other Emirates. For instances, just like Dubai, Abu Dhabi and Ras Alkhaima Emirates have their own local housing financing institutions that provide interest free housing loans. Other Emirates of course rely on the SZHP which serves all seven Emirates.
- 3- The UAE population across the country share similar socio-cultural values, therefore, they are subjected to similar social and psychological influences related to their housing consumption behaviour and preferences.

### **3.6 ACCESS TO THE OBJECTS OF THE INQUIRY**

Securing access to the pre-determined number and category of samples from both the owner-occupant and the owner-to-be populations was the most important task in the data collection efforts (Black, 1998). Geographically, the contemporary middle-class

---

<sup>28</sup> In the UAE context, personal connections and contacts are extremely useful because often public and private information and opinions are treated with high level of confidentiality and secrecy. Researchers who come from outside of the local community face serious difficulties and disappointments when trying to collect data on social and public policy issues such as the one covered by this study.

housing units targeted in this study are concentrated in eight main residential districts<sup>29</sup> within the Dubai urban area which were opened for development in the periods between 1990 and 1998. For area names and geographical locations refer to table 3.10 and figure 3.1.

**Table 3.10 The contemporary residential districts covered in the study sample**

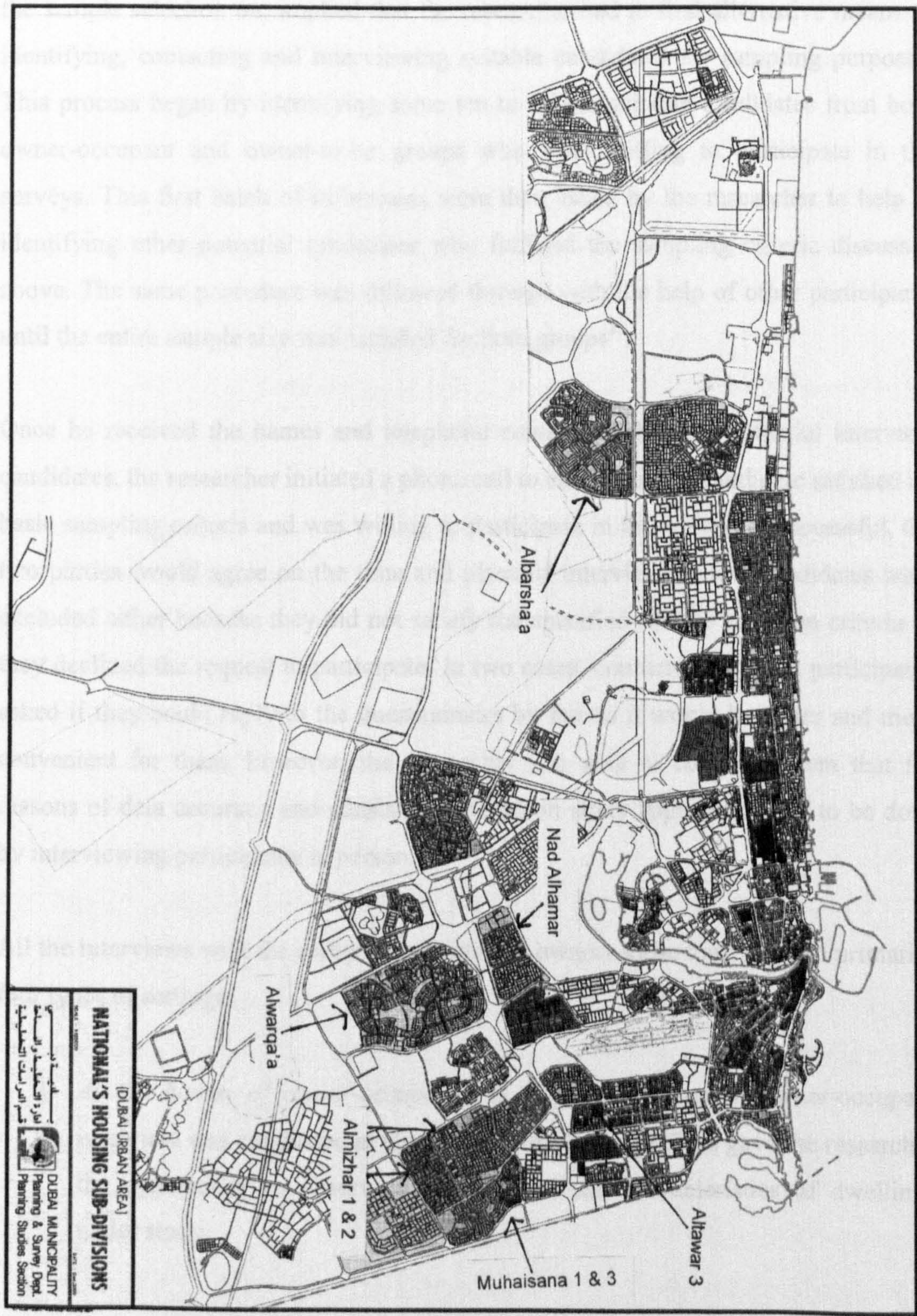
Residential Districts	Year Opened to Development
Altawar 3	1990
Muhaisana 1 & 3	1993
Almizhar 1 & 2	1991
Nad Alhamar	1993
Alwarqa'a	1998
Albarsha'a	1995

*Source: Dubai Municipality, Planning Department*

<sup>29</sup> In total, those eight residential districts cover an area of about 4,095 hectares of low-density housing with approximately 15,128 plots.



**Figure 3.1 Geographic distribution of contemporary residential districts included in the sample surveys**



Source: Dubai Municipality, Planning Department, 2003.



Accordingly, all the samples included in the two surveys came from those eight areas. The fact that there were no sampling frames for either of the two study groups to base the sample selection on, implied that the researcher had to find alternative means of identifying, contacting and interviewing suitable candidates for sampling purposes. This process began by identifying some ten to fifteen suitable candidates from both owner-occupant and owner-to-be groups who were willing to participate in the surveys. This first batch of informants were then asked by the researcher to help in identifying other potential candidates who fulfilled the sampling criteria discussed above. The same procedure was followed through with the help of other participants until the entire sample size was satisfied for both groups<sup>30</sup>.

Once he received the names and telephone contact numbers of potential interview candidates, the researcher initiated a phone call to confirm if the candidate satisfied all basic sampling criteria and was willing to participate in the survey. If successful, the two parties would agree on the time and place of interview. A few candidates were excluded either because they did not satisfy the specified sample selection criteria or they declined the request to participate. In two cases, contacted potential participants asked if they could reply to the questionnaire by fax so it would be faster and more convenient for them, however, the researcher was able to convince them that for reasons of data accuracy and consistency based on study approach it had to be done by interviewing participants in person.

All the interviews with the owner-occupants and owners-to-be took place in primarily four types of settings.

- 1- *At the homes of owner-occupants.* A large percentage of owner-occupant interview was conducted at the homes of participants. This gave the researcher the opportunity to observe the conditions and characteristics of dwellings under study.

---

<sup>30</sup> This procedure is known as the *snowball strategy* of survey sample identification and is often used to identify hard to reach population samples. This method was used because it was not practical for the researcher alone to identify the entire 350 sampling units of the population sample who would satisfy the specified sampling criteria without the help of others.

- 2- *At the house construction site of owners-to-be.* Many interviews with owner-to-be participants were carried out within their private dwelling construction sites. The decision to choose the construction sites gave the researcher an additional advantage by examining and cross-checking the answers with the actual data observed from site inspection.
- 3- *At coffee shops.* Some participants from both groups preferred to be interviewed outside of their homes, so they agreed to meet in certain coffee shops near their homes.
- 4- *At work place.* Based on their requests, a few of the interviews were conducted at the work place of the survey participants.

To avoid any bias resulting from external influence on informants' answers, the researcher asked and ensured that no third person was present while the interviews were conducted at different locations<sup>31</sup>. The private atmosphere created by absence of a third party during the interviews was extremely important in allowing the participants to openly and freely express their views and attitudes towards the research issues specified in the open ended sections of the questionnaires and the in-depth qualitative discussions that followed.

### 3.7 THE SEMI-STRUCTURED INTERVIEWS

In addition to the structured sample survey, this study employed the semi-structured interview method for collecting data to complement and verify the findings of the structured sample survey and fill the gap that exists in the secondary sources of information. The semi-structured interviews were targeted at key stakeholders in the housing development process which included;

1. Five officials from the Dubai Municipality's Planning and Building Control Departments who were responsible for setting housing policy and planning and building standards.

---

<sup>31</sup> The only exceptions were the two owner-to-be interviews with female participants who for cultural reasons had one of their sons present during the interview. For further details on this issue see section 3.10 of this chapter.



2. Fifteen randomly selected independent private consultants/ architects who were involved in designing of private dwelling units for different clients particularly the study target population (i.e., those who designed and built using government interest-free housing loans).
3. Six top and middle rank officials from the two housing financing institutions. Four were from the PHFS and two from the SZHP.

Prior to the interviews taking place the researcher and under the direction of his academic supervisor, prepared and refined a set of three semi-structured interview guides for the above three strategic stakeholder groups (see appendix 3, 4 and 5). The use of interview guides in semi-structure interviews were particularly useful for two reasons:

1. They allowed the researcher to predetermine most important issues and questions related to the aims of this study.
2. The availability of interview guides during the actual interviews served as reminders or a memory prompts so that significant question and issues were not forgotten or overlooked.

Because of the nature and contents of the questions, senior and technically qualified individuals who were familiar with housing policies, procedures and standards were selected for the interviews. Only those consultants/ architects who were directly involved in the housing design process and had extensive and firsthand experience in dealing with middle-class clients were selected for interviews.

In addition to the key housing development stakeholders and because of the cultural and socio-economic dimensions of the housing consumption phenomenon, insights and explanations from relevant and specialised professionals were also sought. Two local sociologists, a cultural anthropologist, two social psychologists and two economist/ marketing specialists were interviewed. The input from this group of informants was mainly used in understanding the different social, psychological,

cultural and economic factors that influence the behaviour and preference of the contemporary housing consumers in the UAE.

All interviews conducted with government officials and local social and economic scientists were conducted in Arabic which is the official language in the UAE. However, interviews with private consultants were conducted in either Arabic or English depending on the nationality of the interviewee. Egyptian, Jordanian, Syrian and Sudanese architects were interviewed in their mother-tongue Arabic, while Indian, Sri Lankan, Pakistani and Filipino architects were interviewed in English, a language spoken by most educated expatriates in the UAE. All semi-structured interviews were conducted at the participants' offices at different times of the day and they lasted between forty five minutes and three hours depending on the time schedules of the interviewees.

Before the start of each interview, the researcher asked every interviewee for permission to use a tape recorder for recording the interview. Some government officials were reluctant to accept this method at the beginning, however, once the researcher explained the purpose behind its use in more detailed manner and gave further assurances that their names and voices will remain confidential and anonymous, they agreed to record their interviews. The researcher believes that the use of tape-recorder did not significantly deter any of the officials from expressing their views freely especially on controversial and politically and culturally sensitive issues. However, all other non-governmental informants were more familiar with this method of data collection and went along without any objections.

### **3.8 SITE/ FIELD OBSERVATIONS**

Field and site observation formed the third component of the primary data collection method applied in this study. Information collected about the physical environment and human behaviour through observational means has the advantage of being direct and does not 'rely on the retrospective or anticipatory accounts of others' (Foster, 1998: 58). The use of observational techniques in this study was primarily driven by the need to confirm the accuracy and reliability and supplement data collected

through other primary (i.e., structured and semi-structured interview surveys) and secondary sources of information.

The field/ site observational method of data collection focused on two major aspects related to middle-class housing choices and preferences.

1. The physical characteristics of the target population housing unit layouts and spatial arrangement and attributes. This involved visits and reconnaissance of more than eighty dwellings that were under construction and about fifty dwellings that were occupied by their owners. During those visits the researcher observed the general housing layouts, the number, types and sizes of spaces in those dwellings and the general patterns of housing space utilization. All observations of occupied dwellings took place during the structured interviews through which the informants volunteered to show the researcher parts or most of the spaces in their homes<sup>32</sup>.

2. Architectural styles of dwelling unit elevation designs, colour of the exterior surface of dwelling units, design of home gardens, main gates, housing decoration and furnishing, internal fittings and fixtures and flooring materials. The observation of those elements was for the purpose of reinforcing the understanding of the role of housing choices and personalization in social distinction and conformity.

In addition to observational surveys of the physical conditions and characteristics of middle-class dwellings, the researcher also employed the non-participant observation technique in data gathering. In total, he spent about twelve hours divided into eight separate cases in the offices of four different private consultants, observing the interaction and dialogue between design architects and perspective middle-class home owners while discussing matters related to their private home design. The aim of this exercise was to capture important data inputs concerning architect/ client relationship, client knowledge of design issues and clients' design preferences and attitude toward dwelling size in particular. All observation cases were conducted with the permissions of consultant office managers. However, none of the clients who were observed as part of this exercise were aware of the fact that they were being observed. To protect

---

<sup>32</sup> Because of privacy concerns access to spaces such as female bedrooms and bathrooms were restrictive.



their identities, the researcher never asked about their names and other personal details, except that they were beneficiaries of government interest-free housing loans.

### **3.9 SECONDARY DATA**

In addition to the primary data collection methods discussed above, this study has also made extensive use of data from secondary sources. Statistical yearbooks, result of socio-economic surveys, population and buildings census, published and unpublished relevant reports and academic studies, federal and local laws and decrees, housing standards and building code documents, copies of official governmental correspondences, samples of private housing design drawings and samples of private housing constructions contracts were all used and specific references are made to them throughout this thesis.

Moreover, national and local newspaper archives were frequently consulted for information and explanation on various historical and current housing and social affairs. Writings from three Arabic daily newspapers, the Al-Bayan, Alemarat Alyoum (Dubai-based), Al-Khaleej and Al-Ittihad and two English daily newspapers, Emirates Today and Gulf News (both Dubai-based) were used for this purpose.

#### **3.9.1 HOUSING UNITS FLOOR PLANS**

The central theme and concern of this study evolve around the issue of housing consumption among middle-class recipients of interest-free government housing loans in Dubai Emirate. It will be highlighted in chapter four how the typical single-household dwelling units have dramatically transformed from simple and small to large and complex structures. Significant increases in the size of contemporary dwelling units were manifested in two aspects.

(1) They contain larger number of rooms and spaces than previously.

(2) Sizes of rooms and ultimately dwelling built-up areas have increased tremendously compared to previous historical trends.

This implied that a detailed analysis of number and sizes of spaces should be carried out in an effort to describe this emerging phenomenon more precisely.

To analyze current trends and general pattern of sizes of different types of rooms in the contemporary middle-class dwelling units, a representative sample data on the exact size (area/ dimensions) of each type of spaces needed to be collected. Ideally, the best option was to ask every participant from the owner-occupants and owner-to-be sample to provide answers to this question. However, this was not practically possible as it was virtually not possible for most of the informants to remember the exact size of each room in their dwellings. Thus, relying on imprecise data would have risked the accuracy of the analysis of this important piece of data. Moreover, the researcher attempted to ask the participants for copies of floor plans of their homes and found that the majority of them declined to respond to this request because:

- 1- Taking and delivering photocopies of original as-built floor plans implied some cost and inconvenience which many informants were not prepared to bear.
- 2- Some informants seemed reluctant to give away a copy of their floor plan, perhaps because of their fear that someone may get hold of it and use it for his home design.

As a result, the researcher had to find a more reliable alternative source of data. After long considerations, it was decided that the best alternative was to select a sample of floor plans from the stock of previous housing projects available with the private consultants. A total of twenty one consultants were contacted and asked to provide random samples of floor plans of private housing projects that were built using government interest free housing loans. Only ten consultants responded positively and provided the required drawings. By the end of this process, a total of 108 sample floor plans were gathered. However, after thoroughly checking the quality of each drawing separately, only 95 (i.e., 88%) of the received drawings were valid for analysis while 13 samples were eliminated because of various problems<sup>33</sup>.

In addition to detailed analysis of a sample of contemporary middle-class dwellings, this study has also made use of a large number floor plans of older houses i.e., from

---

<sup>33</sup> A few drawings were not clear enough to read owing to poor photocopying quality. Some drawings were not complete, for instance missing the plan of one full floor or service block.

the traditional pre-oil era dwelling and the post-oil era transitional period dwellings. Use of historical sample floor plans was only for comparison purposes.

### **3.10 ANALYSIS OF DATA**

The above sections have focused on describing the strategy and methods used in collecting various types of data from both primary and secondary sources. The following sub-sections will move this issue forward by detailing out the key methods utilised in analyzing and presenting both the quantitative and qualitative data and ways in which they were integrated.

#### **3.10.1 QUANTITATIVE DATA**

Once the collection of the questionnaire-based quantitative data was completed for the samples of the two study target groups (i.e., owner-occupants and owner-to-be) all the closed-ended answers to each question were coded and scored. The computer programme Statistical Package for Social Science (SPSS- version 12) has been used for analysing the data. Statistical results of the collected data were then manipulated and presented in two general formats, one-way univariate and cross-tabulated bivariate. The following sub-sections will shed light on methods and techniques of quantitative data analysis and presentation.

##### **One-Way (univariate analysis)**

One-way univariate method of data analysis is primarily used for describing distribution of variables within various study population groups (Bryman, 2001). Moreover, in this study it is also utilised to define issues related to central tendency, statistical variations and level of statistical skewness and symmetry in various sets of data.

In order to make findings of the one-way ordinal and nominal tabulations more visually meaningful and easier to understand, throughout this study, they are presented in graph format. Graph types include vertical and horizontal bar, pie, line,



histogram and box plot<sup>34</sup> which was mainly used in the analysis of sizes of different rooms and spaces in the contemporary dwelling units.

However, it is clear in this context that univariate data alone would not be sufficient to respond to the research objectives and questions stated in chapter one, as one of the aims of the thesis is to understand relationships among several variables.

### Cross-Tabulation

Bivariate cross-tabulation of data 'provides a systematic way of measuring whether two variables are related and if so how strongly they are related' (De Vaus, 2003: 241). To be able to successfully conduct a cross-tabulation, the sample was divided into sub-groups according to the various categories of the controlled variable. The original bivariate relation was then reassessed within each sub-group. 'This division into sub-groups eliminates the biasing inequality by computing a measure of association for groups that are internally homogeneous with regard to the biasing factor' (Nachmias and Nachmias, 1992: 304). Moreover, as stated by Nachmias and Nachmias (1992);

*Generally, only variables that are associated with both the independent variable and dependent variable can potentially bias the results. Thus only variables that show an association with the independent and dependent variables under investigation are selected as control variables.*  
(p. 304)

### Chi-Square Test

Chi-square test ( $X^2$ ) is a non-parametric technique that is widely applied in social studies (Bryman, 2001). Basically, it is used for assessing statistical significance of a relationship in a finding by setting up two hypotheses to test for contingency (Collis and Hussey, 2003). For chi-square test results to become meaningful, two additional statistical calculations must be shown, the degree of freedom ( $df$ ) in the contingency

---

<sup>34</sup> Box plot is a very useful diagram which presents four measures of dispersion and one measure of location: the upper and lower extremes, median, and the upper and lower quartiles (Collis and Hussey, 2003).

data table and the probability value. In drawing conclusions from the cross-tabulated data, the probability ( $P$ ) values are interpreted as follows; below .001 is of high significance, .001 - .05 is of moderate significance and 0.5 and above is of low significance (Hosker, 2002).

### **3.10.2 QUALITATIVE DATA**

Following the completion of the semi-structured interviews, the researcher carried out transcription of all the recorded tapes. Those interviews which were conducted in Arabic were transcribed first in Arabic and then translated by the researcher to English. Although this resulted in almost doubling the time spent on transcribing each Arabic-based interview, this procedure was very useful in reducing incidences of misinterpretation of views and opinions expressed during those interviews.

One of the most obvious differences between semi or unstructured and structured data is that the latter, owing to their inherent nature, are easier to code, whereas the former are not (Boulton and Hammersley, 1998). In the context of this study where qualitative data gathered primarily from semi-structured interviews and secondary sources are utilised concurrently with quantitative data, it is vital that the sets of data for both methods follow a compatible and corresponding coding structure, at least conceptually. Based on this methodological requirement, the researcher applied the '*open coding*' procedure in which that qualitative data were classified, examined, compared, conceptualised and then categorised into specific relevant themes and concepts (Bryman, 2001). Despite being time consuming, the application of this coding procedure was very useful in making efficient use of a large amount of qualitative data.

## **3.11 RESEARCH OBSTACLES AND METHODOLOGICAL LIMITATIONS**

Operational and methodological obstacles and limitations in applied public/ social policy studies are not uncommon (Fitzpatrick, 2005; Bryman and Cramer, 1990). Likewise, this study was confronted with certain constraints that reflected negatively



on its original plan. The following is a discussion of a number of key constraints and limitation faced in the course of preparing this study.

- The most significant methodological limitation faced by this researcher was his inability to apply a probability sampling procedure for the selection of the two structured interview survey samples which formed the backbone of the data collection strategy. It was discussed in section 3.4 that despite several attempts by the researcher to secure a sampling frame, his efforts were not fruitful. And as indicated earlier, lack of a sampling frame of the population study forced the researcher to alternatively use a quota sampling which is a non-probability sampling method. The use of non-probability sampling procedure as explained by Adams and Schvaneveldt (1985) always involves two inherent weaknesses:
  - 1- It is not possible to confirm the probability that a given element in the population would be in the sample, and,
  - 2- It is not possible to ensure that each element in the population had equal chances of being selected.

Because quota sampling does not include any elements of randomization, the size of sampling error could not be estimated (De Vaus, 2002). This ultimately meant that the researcher 'had no firm method of evaluating either the reliability or the validity of the resulting estimates' (Levey and Lemeshow, 1999: 21).

- The UAE is a relatively young nation, its institutions are still in the formation stages and most of them lack advanced systems of data capturing and recording (Al-Mansoori, 1997). Moreover, because of paucity of both applied and academic research in the housing and urban development policy arena<sup>35</sup>, the importance of data and documentation of substantive policy documents has not yet received adequate attention from responsible institutions. For instance, neither the PHFS nor the SZHP have captured any systematic data on the housing conditions/ characteristics of their loan beneficiaries. Moreover, despite its significance in the current housing policy environment, there is no formal and reliable data on the

---

<sup>35</sup> Most public policy decisions taken by governmental entities are rarely backed by any research or systematic policy analysis, rather they are often pursued as a result of personal instructions given by top level politicians.

current and past cost of construction relevant to the study population group. This and other gaps in the basic data ultimately placed additional burdens on the researcher to collect and verify his own sets of data samples which proved to be a very demanding and time-consuming exercise.

- Despite the extensive modernization and urbanization trends, the indigenous people of the UAE still maintain much of their original conservative and traditional character. Because of strict tradition of separation between male and female members of society, access to female informants was highly restrictive. For instance, the owner-to-be sample included only two interviews with female heads of household. Arrangements for those two meetings took a long time and serious efforts and could only be conducted in the presence of one of their grown up sons<sup>36</sup>. Additionally, this study attempted to examine the much talked about role and influence of women (i.e., wives and daughters) on dwelling design and size decisions, but due to the experienced difficulties associated with interviewing females, it was not possible to make arrangements for such meetings.
- In general, the people of the UAE are not inclined to adhere to fix appointments and are known for their unpunctuality. Starting and ending an interview on specified and pre-determined timetable during the data collection fieldwork was a rarity. Meetings often started later than scheduled timings and in most cases ended later than anticipated. Several meetings were cancelled at the last moment and sometimes without prior notice. Starting time of many meetings were delayed by thirty minutes to one hour because concerned informants insisted on serving drinks and sweets to the researcher as a sign of respect and hospitality. All these delays and cancellations of meetings disrupted the overall fieldwork programme and exerted unforeseen pressure on the researcher's time and concentration as he had to reschedule meetings and make up for the lost and unproductive time.

---

<sup>36</sup> Following local customs, both informants covered their faces in the presence of the researcher because of him being a non-mahram. With more access to education and mixed-gender workplaces, such practices are now slowly diminishing from the social lives of UAE female citizens.



### **3.12 SUMMARY**

This chapter has explained the research data collection strategy, methods and procedure. It also provided the rationale behind the selection of such approaches. Moreover, the chapter presented some elaboration of the obstacles and limitations experienced in the study.

# **Chapter 4:**

## **HOUSING POLICY, INSTITUTIONS, DEVELOPMENT PROCESS AND EVOLUTION**



## 4.1 INTRODUCTION

The aim of this chapter is to present a broad overview of the study area context and background. The chapter starts with a brief description of the United Arab Emirates and Dubai Emirate. This is followed by concise overview of the existing system of governance, and economic and demographic transformation. The review also includes a detailed explanation of the new welfare system that has emerged following the discovery of oil in the 1960s. Some light will be then shed on the origin and characteristics of the newly formed middle class. Changes in patterns and practices of private consumption within the newly affluent study area population are also outlined and contrasted with past historical trends.

Attention is then turned to government's housing provision policies under the new welfare state. Analysis will include assessment of housing subsidy policies across different income groups and the political rationale that justifies their continuation. It also discusses major developments that have taken place in the housing conditions of the study population within the last ten decades. This review of the historical transformation in housing conditions and consumption pattern is highlighted in line with changes in the economy and government's involvement in the provision of housing and other forms of subsidies.

Finally, the chapter will conclude with the identification of the contemporary housing development process. It encompasses all the key components of the process and provides insights into major roles and policies of various institutional key stakeholders from both the public and private sectors.

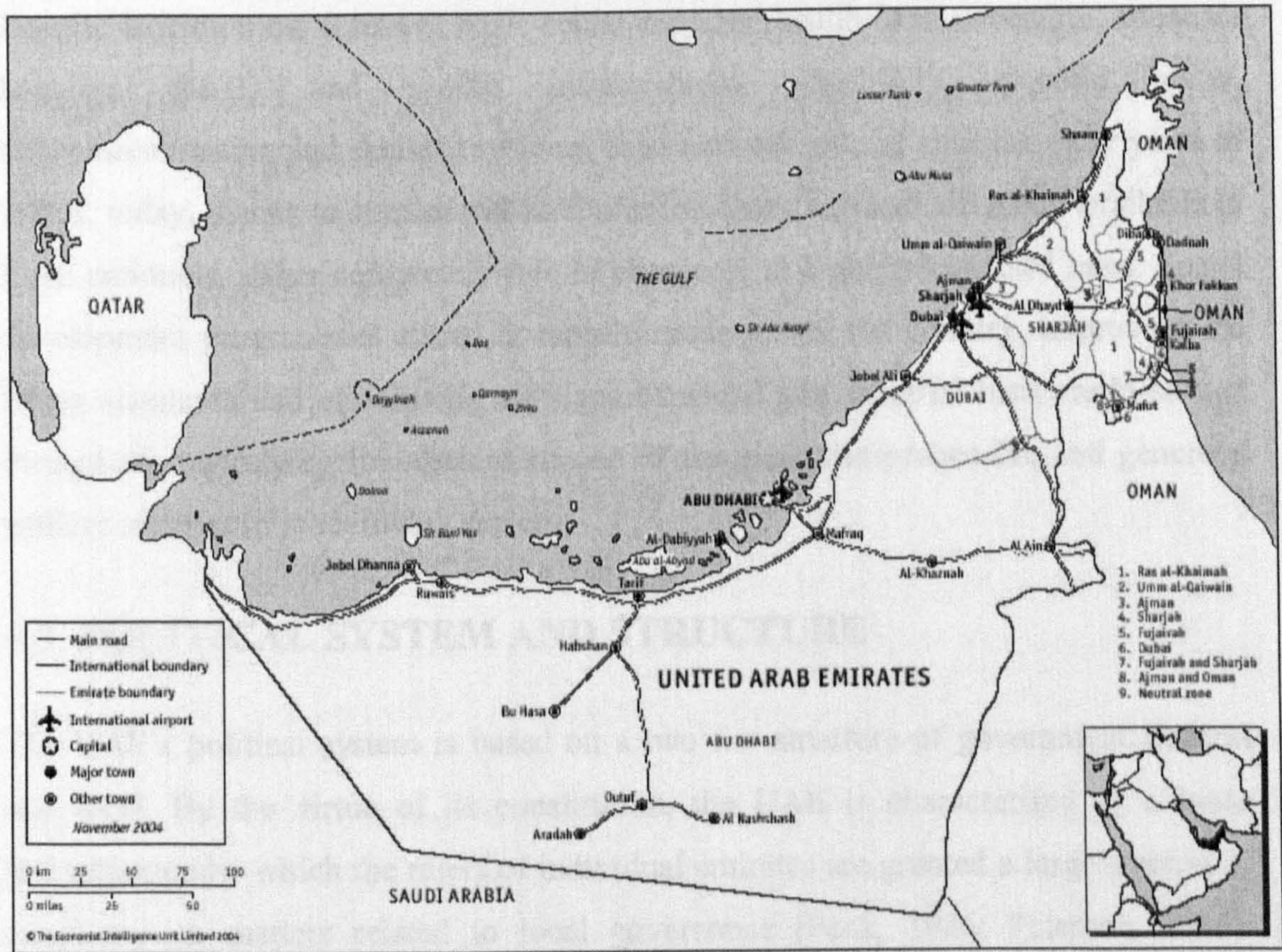
## 4.2 THE UNITED ARAB EMIRATES (BACKGROUND)

On the 2<sup>nd</sup> of December 1971, the political union of the United Arab Emirates (UAE) was officially declared. The UAE federation comprises of seven independent city states, otherwise known as *emirates*: Abu Dhabi, *Dubai*, Sharjah, Ras Al-Khaimah, Umm Al-Qaiwain, Fujairah and Ajman. Up until 1971, the emirates were under *de facto* British rule that lasted for more than one hundred years and were referred to as



the *Trucial States* <sup>37</sup>. Geographically, the UAE lies to the south-east of the Arabian Peninsula and it is bounded partly by the Arabian Gulf and partly by the Gulf of Oman. See plate 4.1. The country's total land area is approximately 83,600 sq km (32,278 sq miles), roughly the size of Austria. The UAE's current population is estimated at around 4.23 million of which more than 80 per cent are expatriate guest workers and their dependants.

Plate 4.1 Map of the United Arab Emirates



Source: *Economic Intelligence Unit, 2004*

A harsh dry climate coupled with marginal economic conditions kept the population of the region low and economically depressed until oil was discovered in commercial quantities during the 1960s. Today, the UAE is the world's twelfth largest oil producing nation and a prominent member of the international oil cartel OPEC. The national wealth generated through the sales of crude oil in international markets has

<sup>37</sup> 'The British signed a series of agreements with the sheikhs of individual emirates that later augmented with treaties on preserving a *maritime truce* (in 1892), resulted in the area becoming known as '**The Trucial States**'. The treaties with Britain meant that the sheikhs could not engage in independent relations with foreign powers and were obliged to accept the advice of Britain in certain defined areas' (Ministry of Information and Culture, 2004: 40).



been instrumental in comprehensively transforming the UAE society from extreme conditions of deprivation and poverty to economic surplus and mass consumption. Current annual per capita income which exceeds US\$ 19,000 is comparable to that of industrialised nations, despite the substantial and rapid population growth throughout the past four decades. Large sums of oil revenue brought about sweeping changes in the economic structures, social values and institutions, and physical environment throughout the UAE.

Despite lacking most forms of basic social services (health care, education, adequate housing, etc...) and public infrastructure (electricity, potable water, telecommunication and sanitary systems, road network, etc...) until the early years of 1960s, today, thanks to surplus public resources, those services are made available to UAE nationals, either completely free of charge or at highly subsidised rates. Social development programmes aimed at rapidly modernizing the country, improving the living standards and eliminating all signs of social and material backwardness had formed the underlying foundations of one of the most comprehensive and generous welfare regimes in modern day society.

### **4.3 POLITICAL SYSTEM AND STRUCTURE**

The UAE's political system is based on a two tier structure of government; federal and local. By the virtue of its constitution, the UAE is characterised as a loose federation under which the rulers of individual emirates are granted a large amount of autonomy on matters related to local governance (Peck, 1986; Peterson, 2003). Articles 120 and 121 of the UAE Federal Constitution, clearly define the responsibilities of the federal government which include foreign affairs, security and defence, nationality and immigration issues, education, public health, currency, postal, telephone and other communication services and air traffic control and licensing of aircrafts. The Constitution also states in Article 116 that the governments at Emirate level shall exercise all powers not assigned to the federation by this constitution. This meant that most local institutions established before unification could be retained and additional governmental entities could also be created independent from federal government, given that they are not in conflict with federal jurisdictions or they could be considered as supplementary to existing federal

institutions. Furthermore, the autonomy of local government authorities was further boosted by Article 23 which considers all natural resources (most importantly oil) found within the boundaries of each member's state as complete and absolute governmental property of that emirate. Individual emirates are also free to dispose of their resources the way they see best. Moreover, there are no federal legal restrictions on local governments to introduce local taxes or provide services.

Within traditional political settings, each emirate in the UAE had its local ruler referred to as *Sheikh* or *hakem*, who came from the most powerful, though not necessarily most populous tribe (Ministry of Information and Culture, 2005). It was crucial for the rulers to maintain widespread tribal loyalty, if they were to hold on to their sheikhdoms. Despite material modernization and establishment of a modern state, tribal loyalties continue to play important roles in the political affairs throughout the country (Foley, 1999).

Rulers of the emirates before national unification in 1971 continue to rule their respective emirates through hereditary dynasties. Under this traditional form of governance, the ultimate power of decision making is retained by the ruler. However, most often, important decisions are made after private consultations with advisors, close associates and representatives of interest groups.

Currently, none of the emirates have any freely elected legislative bodies and there is no clear separation between legislative, executive and judicial powers as they are tightly controlled by the rulers. Public policies and regulations are implemented through local and federal bureaucratic departments, ministries and special boards, normally headed by entrusted members of the ruling families or members of prominent tribal families. The deliberations of most public sector institutions are not transparent or accountable, thus allowing for considerable scope for inefficiency as instances of incompetence, corruption or excessive favoritism are hidden from public view and rarely open to challenge (EIU, 2005).

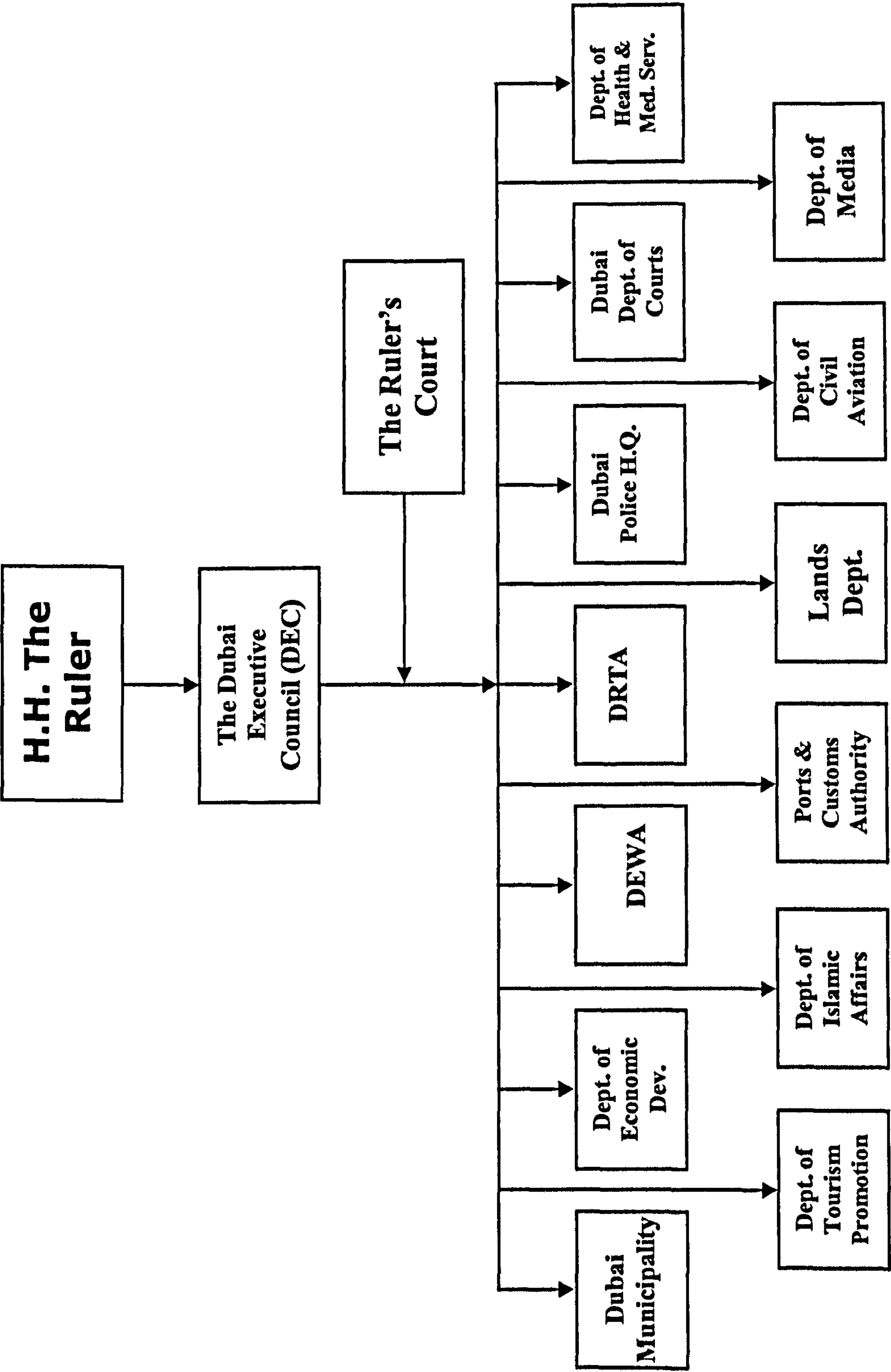
In Dubai Emirate, a large and comprehensive bureaucracy has been developed and charged with responsibilities of providing social services, orchestrating economic development and enforcing the laws and regulations. Administratively, the Ruler's



Court (*diwan al-hakem*) is responsible for the management of affairs related to the relationship between the Ruler and both his bureaucratic institutions and the citizens. Local departments' annual budgets for instance, must be submitted and reviewed by the Ruler's Court Finance Department before they are approved. The citizens on the other hand, submit their requests for various government grants such as residential plots and other forms of formal and informal public assistance through the same institution. Furthermore, the Court is responsible for formally issuing local laws, orders and regulations.

In February 2003, the Dubai Executive Council (DEC) (*al-majlis al-tanfeedhi*) was set up by a local decree. The DEC which is headed by Dubai's Crown Prince, the *de facto* ruler of Dubai, includes the appointed directors general of all local government departments. In addition to its role in strengthening inter-departmental coordination, the DEC is also responsible for taking measures necessary to implement federal laws, suggesting and assessing local laws and regulations, discussing sectoral development strategies and proposing the annual local government capital investment budget. There has been very little discussion on housing issues, though the Council has recently announced that a special committee will be established to make sure that private companies provide their low-paid expatriate laborers with adequate housing (Gulf News, 8/3/2005). Figure 4.1 shows the basic structure of Dubai's local government.

Figure 4.1 Dubai Emirate local government structure



Source: Author



## 4.4 ECONOMIC STRUCTURE AND CONDITIONS

### *Before 1960s*

Prior to the late 1950's the vast majority of the population in the Trucial States, including in Dubai, lived at a subsistence level, virtually indistinguishable from that which they had reached centuries before (El-Mallakh, 1981). Throughout the nineteenth and early twentieth century, pearling and fishing formed the backbone of the economies of the region. An overwhelming majority of the working age men in coastal towns were involved in employment related to those two economic activities, while a smaller proportion of the rural population were engaged in limited agriculture, rural handicrafts and herding (Ghanem, 1992). By 1910, the pearling merchants in Dubai had about 340 pearling boats and contributed to a tax revenue of 41,388 Rupees <sup>38</sup> (£5,000) levied by the Ruler, second only to Abu Dhabi (Makki, 1990). At the turn of the twentieth century nearly 10,000 people inhabited the three main residential quarters of the town (Osborne, 1977). The pearling industry, however, was heavily destroyed by the twin calamities of the 1930's great global economic depression and the development of the Japanese cultured pearl industry (Ministry of Information and Culture, 2004). The shrinking demand for pearl from the Trucial States caused widespread bankruptcies, sharp decline in tax revenues, unemployment and further economic hardships for jobless men and their families (Zahlan, 1998).

Dubai, however, had managed to sustain an economy, albeit small, that was built on gold smuggling to India, where the gold price was more than double that in the world market (Osborne, 1977). Unlike other parts of the Trucial States, Dubai also managed to develop a thriving re-export market by utilizing its natural harbor of the Dubai Creek (*khorr dubai*) and imposing low taxes, minimum government interference and red-tape. In 1950, the income from custom tax reached 1,440,000 Rupees, nearly 86% of the total government revenues (Makki, 1990). Increasing demand for Dubai harbours in the wake of rising oil production in other parts of the Gulf <sup>39</sup> and active import markets in Iran and India led to

---

<sup>38</sup> As a result of close commercial and political ties with India, the Indian Rupee became accepted throughout the towns of the Trucial States and the rest of the Arab Gulf states until national currencies replaced it.

<sup>39</sup> Oil was discovered and exported much earlier in other Arab Gulf states. Bahrain (1934), Saudi Arabia (1944) and Kuwait (1946).

a decision in 1958 to improve capacity and safety of the Creek harbour to be able to handle larger cargo ships (Heard-Bey, 1996). The flow of foreign goods through Dubai created a wide range of opportunities for new businesses, storage services, boosted the property market in the area around the Creek and increased state income from custom tax (Peck, 1986). It was estimated that, in 1957, there were nearly 30,000 inhabitants in the city (Makki, 1990). However, during this period many working-age men had left Dubai, and other parts of the Trucial States, for other oil-producing Gulf states where there were opportunities for employment in the oil and service sectors (Ministry of Information and Culture, 2005).

Dubai as well the northern emirates of the Trucial States were to a large extent dependent on external financial aid from Britain, the oil-producing Arab Gulf states (Kuwait, Qatar, Bahrain and Saudi Arabia) and to a lesser extent the United Nations (Hawley, 1971). Foreign donations were used to finance specific development projects and social service schemes. Despite earlier generous contributions provided by the British Government, most of the capital funds used to implement more expensive projects came from neighbouring oil-producing Arab Gulf states including Abu Dhabi after becoming an oil producer in 1962 (Hawley, 1971; Heard-Bey, 1996). The Kuwaiti government, for instance, provided Dubai with an interest-free loan of £500,000 to improve the Creek harbor (Heard-Bey, 1996). In 1962, the Ruler of Qatar donated £190,000 to finance the construction of Dubai's first bridge across the Creek. A few years later, he also accepted to pay for the installation of Dubai's first potable water system (Hawley, 19971). The Kuwait government, between 1963-1968, built an 80-bed public hospital in Dubai (Heard-Bey, 1996). Several schools, roads and health facilities were also built and operated by the Gulf states in other emirates.

### *After 1960s*

By the latter parts of 1960s when oil was discovered in commercial quantities, economic paucity and hardship were beginning to give way to prosperity and affluence (Sadik, 1996). Over the past four decades, oil has played an inordinately key role in the modern development of the United Arab Emirates (Shihab, 1996). Between 1970 and 1977 the country's GDP rose by 800 per cent (Owen, 1981). Since then, the UAE economy has been growing though at much slower rates. The national GDP, for instance, grew from



only \$14.36 billion in 1975 to \$79.87 billion in 2003 (Taryam, 1987; Dubai Municipality, 2003). Per capita national income, on the other hand, rose from as little as \$550 in 1965 (El-Ghonemy, 1998) to \$19,751 in 2003 (HSBC, 2004), multiplying by nearly 36 times. Such an income level is comparable to those of industrialised developed countries.

Although the UAE is known as an oil-producing nation, only the emirates of Abu Dhabi, Dubai and Sharjah actually produce and sell crude oil in the world market. The economies of these three emirates together account for almost 95 per cent of the national GDP (Ministry of Information and Culture, 2005). Abu Dhabi Emirate, which is one of the key international oil producers,<sup>40</sup> dominates with nearly 60 per cent of the country's economy and enjoys the highest income (HSBC, 2004). The economy of Dubai is the second largest among all emirates, with a share of 26 per cent of the national GDP and a total value of \$20.9 billion (Dubai Municipality, 2003).

Despite its great economic importance, oil production in Dubai Emirate has been declining steadily and is considered modest compared to that of Abu Dhabi Emirate<sup>41</sup>. The contribution of the oil sector in Dubai's economy has dropped from 48 per cent in 1985 to 24 per cent in 1993 and finally to only 7 per cent in 2003 (Ministry of Information and Culture, 2005). Moreover, the government expects that by 2010 oil will only account for 1 per cent of Dubai's GDP (Ministry of Information and Culture, 2005).

The economy of Dubai Emirate is the most diversified among all Gulf economies (Askari and Jaber, 1999). Building on its past entrepreneurial tradition, the Emirate has managed to move away from heavy dependency on crude oil to a more diversified economy. In 2003, trade and manufacturing were the two most productive sectors of the economy, each contributing for nearly 16 per cent of the local GDP, while transport and communications, construction, real estates, government services, tourism and financial services each contributed between 5 to 10 per cent (Dubai Municipality, 2003). And Dubai's average income per capita was \$16,943 some \$2,800 less than UAE's national average (Dubai Municipality, 2003; HSBC, 2004).

---

<sup>40</sup> The Emirate of Abu Dhabi has a proven oil reserve of 92.2 billion barrels which constitutes 94.3 per cent of UAE's total reserves and 8.6 per cent of proven world oil reserves (Ministry of Information and Culture, 2005).

<sup>41</sup> Dubai has a proven oil reserve of 4 billion barrels, but the recoverable portion is only between 1.6 to 2 billion barrels (Ministry of Information and Culture, 2005).

Although, Dubai has managed to diversify its economic base away from crude oil, the fact remains that oil is still the single most important source of government revenues. Nearly 50 per cent of Dubai Government's revenues are generated from the sale of crude oil (IMF, 2004). Moreover, local government budget has been enduring an annual average of 10.7 per cent deficit between 1999 to 2003 (IMF, 2004; Peterson, 2003). This was primarily caused by the general decline in the price of oil but more importantly by the constant increase in public sector expenditure and subsidies. Similarly, the federal government budget, which receives more than 85 per cent of its share from oil revenues, has been plagued with a persistent annual budget deficit of more than 10 per cent since 1982 (HSBC, 2004; Elhiraika and Hamed, 2002). This was also caused by major decline in oil revenues and burgeoning public overheads. Although both UAE and Dubai have managed so far to avoid major borrowings to cover their deficits, this problem has undoubtedly reduced public sector ability to spend on essential social development programmes such as education, health and other sectors of social services (Bahgat, 1997; Peterson, 2003).

#### **4.5 DEMOGRAPHIC COMPOSITION AND CHARACTERISTICS**

The demographic conditions of the UAE have undergone major changes in the past four decades, primarily caused by unprecedented economic affluence driven by oil windfalls (Shihab, 1996). Well into the latter parts 1960s, the Trucial States were ranked among world's least populated regions (Duke-Anthony, 1975). In 1968 for instance, the seven emirates together had only 180,000 inhabitants of whom 59,000 or one third lived in Dubai (Trucial States Council Development Office, 1968). By 2004, the country's population had reached 4,230,000 of which Dubai's share reached 1,192,756 or 28.2 per cent, making it the second most populated Emirate after Abu Dhabi (Ministry of Information and Culture, 2005). Over the last thirty five years the population has multiplied by nearly twenty four times. Thus, the UAE is now placed among the fastest growing populations in the region (EIU, 2004).

It is important to highlight that, while natural growth in the UAE is among the highest in the world, most of this massive increase in population experienced throughout the last few decades was caused by immigration of a labour force drawn into the country after the discovery and exploitation of oil in international markets. Acute shortage of skilled and



unskilled labour within the national population needed for the implementation of huge and ambitious socioeconomic development projects and the running of the services in both the private and public sectors. Those have forced the country to attract large numbers of foreign workers (Winckler, 2000). Today, the expatriate population of mostly male Indians, Pakistanis, Iranians and a host of other nationalities who, by and large, outnumber the nationals<sup>42</sup>. This issue is perceived as a serious political, economic and social threat to the future of the country (Foley, 1999).

In Dubai Emirate, the national population has grown at an average annual rate of 3 per cent from less than 38,000 in 1968 to nearly 140,000 in 2004. Despite its relatively high growth rates, the percentage of nationals has dropped dramatically from 64 per cent in 1968 to only 12 per cent in 2004. This is caused by rapid growth in the economy and increasing projects in the construction sector which is one of most labour intensive sectors in the economy<sup>43</sup> (Abdelkarim, 2001). See table 4.1 for further historical data on population growth and the share of the national population.

---

<sup>42</sup> The Gulf countries including the UAE have not pursued policies of mass naturalization of its foreign labour force, owing to the very small size of their indigenous population and fear of loss of their national identity.

<sup>43</sup> Because of legal and economic restrictions, most low-paid workers including in the construction sector do not bring their families with them.

Table 4.1 Population growth in Dubai Emirate

Year	Total population	National population	%
1968*	59,092	37,819	64
1970**	100,000	45,059	45
1975*	183,187	55,070	30
1980*	276,301	66,988	24
1985*	370,788	81,500	22
1990**	498,417	100,988	20
1995*	689,420	110,343	16
2000*	862,387	125,762	15
2004**	1,192,756	139,639	12

Source: Dubai Municipality, 2003; Sultan, 2002; IMF, 2004

\* actual census    \*\* estimate

In addition to massive growth in the population and overwhelming dominance of expatriate working-age male population, life expectancy in the UAE has increased from as low as 46.5 years in 1960 to 74.6 in 2002 (Winckler, 2000; UNDP, 2004). Such dramatic improvement is attributed to tremendous advancement in health care services, enhanced nutrition, and working and general living conditions (Ministry of Information and Culture, 2005).

Another major shift in demographic characteristics of the national population is the changing nature and size of households. In the times before the new oil era, the extended family was the most common form of living arrangements among the population in both coastal and inland settlements. Family members of three or more generations used to live either in a single dwelling unit or in tightly built clusters of blood-related family homes (Heard-Bey, 1996). As time passed and economic conditions improved, social and family institutions have also changed. With increasing urbanization and changing social values and preferences, the nuclear family has become the most dominant and chosen living arrangement among the nationals in Dubai and throughout the rest of UAE (Abu Shehab,



2000). As a consequence, average household size has dropped from 8.5 in 1975 to 6.2 in 2000 (Dubai Municipality, 1986; 2000 b). This drop is attributed to a number of factors, among which are, deferred marriage age among both male and female nationals because more youths are now involved in higher education, greater involvement of females in the workforce and higher cost of children upbringing (Ghareeb and Al-Abed, 1996; Abdelkarim, 2001).

#### **4.6 THE EMERGENCE OF THE MODERN WELFARE STATE AND ITS FUTURE PROSPECTS**

Nearly four and a half decades ago, Dubai like the rest of the towns in the Trucial States was suffering from lack of basic social services and adequate public infrastructure which was primarily caused by widespread poverty and lack of adequate public resources (Abdullah, 1978). Therefore, the local inhabitants had to rely on traditional and somewhat primitive methods of education, health care, transportation, drinking water resources and building construction (Al-Fahim, 1995).

By the early 1950s, limited yet important steps were taken towards the provision of public services and improvement of the social welfare of the local communities in the Trucial States (El Mallakh, 1981). In 1952, the British colonial authority in the Gulf established the Trucial States Development Fund (TSDF) which was the first formal institution responsible for planning and execution of development projects throughout the towns of the Trucial States (Fenelon, 1973; Heard-Bey, 1996).

In 1950, Dubai's first hospital was opened and served the whole population of the Trucial States (Makki, 1990). The cost of this 38 bed hospital was borne by the British government while the running cost was paid for by the Rulers of the Trucial States; the biggest share came from the Ruler of Dubai (Heard-Bey, 1996). Basic medical services were only given free of charge to the very poor, while more affluent patients had to pay fees that were used for financing the running expenses (Hawley, 1971).

Formal modern educational facilities were lacking until 1954 when the Kuwaiti Government built, equipped and staffed a number of primary schools in the main towns

of the Trucial States (Abdullah, 1978). Electricity supply was initiated as late as 1961 by a private company established by a group of local merchants and chaired by Dubai's Ruler (Hawley, 1971). The company sold electricity to its consumers at market rates. Therefore, only affluent families and most shop owners could afford the luxury of electricity (Hear-Bey, 1996). Even when people subscribed to electricity, they were asked not to use more than one air-conditioner at a time to avoid power drop at the 1440 kilowatts diesel power generation station (Makki, 1990).

Although the first car was brought to Dubai in 1930 (Heard-Bey, 1996), the town did not have any paved roads until 1961 (Osborne, 1977). A year later a bridge financed by Qatari donation was built across the Dubai Creek. Each vehicle crossing the bridge had to pay the Ruler 5 *Annas*<sup>44</sup>, this was the first ever known public toll road in the region (Sultan, 2002). Dubai was also the first town in the Trucial States that had adopted a property tax regime (Makki, 1990). Although forthcoming revenues from those taxes were small, they were, nevertheless, important for looking after the town's three drinking water wells and domestic solid waste removal.

In summary, right up until the beginning of 1960s, inhabitants of Dubai had very little or no access to modern social services and public utilities. Whatever basic services were available in the town, they were either funded by assistance and donations from other countries or were set up as private enterprises. During this period, services such as electricity, telephone and potable water supply were completely new, rudimentary and provided to consumers at market price. The majority of the population were not able to afford the cost of consuming most basic services owing to their poor economic status. Moreover, the Ruler did not possess much surplus resources, nor was there a significant tax base that could be utilised to provide for more advanced and universal social services and the development of physical infrastructure (El Mallakh, 1981).

This situation, however, was completely turned around with the discovery and exportation of crude oil in the late 1960s. Though not blessed with huge oil reserves and production capacity compared to the Emirate of Abu Dhabi and other Arab Gulf states, it was enough to revolutionize Dubai's economy and to pave the way for the creation of a new kind of relationship between the Ruler and his subjects (Zahlan, 1998). Following



the tracks of other oil-producing Gulf states, Dubai joined the club of what is referred to in modern literature of political-economy as the *rentier welfare states*<sup>45</sup>. In this, the state, represented exclusively by the ruler, would collect high rental income from external oil concessions and use that money to run the state apparatus, including social welfare services and programmes, without the need to collect taxes from the population<sup>46</sup> (Crystal, 1995; Richards, 2004).

Welfare-building efforts were clearly driven by triple policy objectives. Firstly, developing systems of modern and advanced infrastructure such as road network, electricity, potable water systems, airports, ports and telecommunication that are crucial to economic and social development of the society (Winckler, 2000). Secondly, the development of universal and high-quality social services including health care, education and housing required to improve the quality of life among the national population (Weiner, 1982). Thirdly, reducing poverty and enhancing the economic status of nationals through various wealth distribution methods, mass employment and opening avenues for private investment opportunities (Taryam, 1987; Makki, 1990).

Dubai's commitment to the establishment of a comprehensive state-sponsored system of social welfare was further reinforced by two major events (1) joining the UAE federation 1971, and (2) the quadrupling of the oil price in the international markets in 1973- 74.

As large sums of oil revenue were pouring into the Ruler's treasury, existing privately operating utility companies were bought off and nationalised by the Emirate and most forms of taxes and fees were abolished. The abundance of oil income has enabled the government to embark on one of the biggest modernization and state-building projects ever experienced in modern days (Osborne, 1977; Heard-Bey, 1996). Dubai City's built-up area has been growing since then by an annual average of 3 per cent from as little as 18 square kilometers in 1970 (Dubai Municipality, 1986) to 285 in 2005. Existing bureaucratic institutions were rapidly expanding in both size and responsibilities and new

---

<sup>44</sup> One Indian Rupee includes 16 Annas.

<sup>45</sup> For more insights on the concept of rentier welfare state, see Hazem Beblawi and Giacomo Luciani eds. *The Rentier State* (New York; Croom Helm, 1987).

<sup>46</sup> There is a large and expanding body of literature on the origins, causes and political ramifications of the contemporary rentier states. Though it is an important and interesting topic, this discussion is beyond the interest and scope of this study.

departments were also established to manage the burgeoning state involvements in the social, economic and physical development affairs (Sultan, 2002).

Under this newly born welfare state, access to free education (i.e. from kindergarten to university), health care and serviced residential land have become an essential part of the rights of all citizens (Peterson, 2003). As the coming discussion will show, government *largesse* also includes the provision of free of charge housing units to low-income households and payments of large sums of soft and interest-free housing loans for middle-income households. Despite its high production cost<sup>47</sup>, domestic water supply is provided free of charge to all national households. Electricity is heavily subsidised and so is petrol fuel and basic food stuffs<sup>48</sup> (Abu Shehab, 2000). National households in Dubai even receive a free monthly supply of bin bags from the government.

On a less formal basis, nationals also benefit from numerous generous government handouts. For instance, the government quite often covers the full expenses of medical treatment of those who need to be sent abroad, where they can find more advanced and specialised forms of treatments. Nationals who are interested in performing pilgrimage (*Hajj*) or (*Ummrah*) in Mecca, Saudi Arabia, are often helped with free airline tickets. In other instances, some nationals have even succeeded in getting their new homes furnished and equipped with all appliances at the expense of the government.

The UAE federal government<sup>49</sup> also plays an important role in the provision of social services and benefits to citizens in Dubai Emirate. For instance, it pays for the monthly social security assistance granted to low-income households, unemployed handicapped adults and other groups with special needs. Eligible nationals are also provided with full scholarship grants to attend higher educational institutions abroad. Moreover, in an effort to reduce the financial burdens on young nationals and encourage early marriage among nationals, in 1992 the federal government founded a nationwide Marriage Fund (*sundooq*

---

<sup>47</sup> Because of its arid desert environment the UAE has extremely low rainfall rates and has to extensively depend on desalinated sea water from the Arabian Gulf.

<sup>48</sup> Food items are mainly subsidized through exemption from import custom taxes. Therefore, the whole population benefit from this form of subsidy.

<sup>49</sup> About 60 per cent of UAE federal government budget is financed by the Emirate of Abu Dhabi and the rest is paid for by Dubai Emirate and federal taxes and fees (Peterson, 2003).



*al-zawaj*), which pays every national male preparing to get married to a national female an amount of AED 70,000 (\$19,075).

The above examples vividly illustrate the strong and prominent presence of the state in the everyday lives of the citizens. However, the important question remains; what are the future prospects of this generous yet seemingly unsustainable welfare regime?

While it is the desire and interest of both the government and its citizens for the existing welfare system to continue as it serves very important political, economic and social objectives, one can express very little optimism for its future prospects (Richards, 2004). Despite surviving for nearly four decades, there are clear signs that it has never been a problem-free system. Because most of the financing of the welfare services comes from oil revenues, their provision has always been influenced by the volatility of the international oil price (Rivlin and Even, 2004). For instance, the steep fall in the price of oil during the early and middle 1980s coupled with the paucity of non-oil taxes and climbing public expenditures caused severe budgetary deficits and, thus, major cut-backs in social welfare programmes (Al-Mansoori, 1997). To illustrate, despite growing population and rising costs of provision of public services, the UAE federal budget was reduced by 7 per cent in 1984, 10 per cent in 1985 and a further 15 per cent cut in 1986 (Peterson, 2003).

Moreover, the welfare benefits and entitlements in the UAE were increased and expanded very generously without much regard for their snowballing effects. Rapid increase in population and heightened public expectations have, therefore, placed unforeseen and tremendous pressures on social services budgets. As a result, most major welfare providers are now having to deal with long waiting lists and increasing public dissatisfaction. For example, after thirteen years of its establishment, the Marriage Fund has a backlog of four years and an accumulative waiting list of more than 7,000 eligible applications owing to insufficient funding (Al-Bayan, 7/3/2005). To make things even more complicated, the programme still has to accept new applications coming through on a daily basis. In housing, the situation is even more acute as longer waiting lists are found and approval rates have been badly slowed-down by lack of adequate funds. This will be discussed in greater detail in the latter parts of this chapter.

Another challenge for the current welfare style comes from external sources. International development organizations such as the World Bank, International Monetary Funds (IMF) and the World Trade Organization (WTO) have all called for major reforms in the subsidization policies in the Gulf region, including the UAE. The central argument presented in all cases is around the negative implication of extensive subsidies on the functioning of the free markets. The extensive subsidy programmes have also been seen by some international organizations as an obstacle towards real political reform in the Gulf region and, therefore, this has often been used as a platform for calling to scale back the tax-free welfare system. It is not clear whether any of these pressures would result in any major alteration in the way existing welfare policies are practiced in the short and medium terms.

#### **4.7 THE EMERGENCE OF THE NEW MIDDLE-CLASS**

The middle-class is an entirely new phenomenon in the Arab Gulf states (Amuzegar, 1982). In fact, it has only existed as a distinctive socioeconomic class for less than forty years. In the traditional and subsistence pre-oil economy, society was polarised into two classes; the majority poor working class and the minority affluent mercantile and political masters (Rumaihi, 1978). It was only after oil was discovered and nationalised that a middle-class evolved as a new and separate socioeconomic class in the oil producing states of the Gulf, including the UAE (El-Ghonemy, 1998). A number of scholars and social scientists have suggested that the middle-class was created by major changes in the economic structure, modernization process, spread of formal secular education, and expansion in government bureaucracy and private enterprises, which were fueled by the economic boom created by oil money<sup>50</sup> (Rugh, 1973; Barakat, 1993).

Deliberate government policies on wealth distribution and eradication of long-suffered poverty by utilizing oil revenues are among the most important factors that gave rise to this new and peculiar class. Therefore, it is often said that the middle-class in oil-rich states is the product of government initiative rather than free-market industrialization (Rugh, 1973). Moreover, the creation of job opportunities in the unproductive, yet, highly



paying, public sector has been treated as both welfare increasing policy and a means for driving economic development forward (Rivlin, 2004). Such social and economic policies coupled with small size of the indigenous population at the time when oil was discovered and national independence achieved, have turned the governments of the region into the largest employers of the new and mostly educated middle-class (Barakat, 1993). On the part of the citizens, ‘to be employed in the state’s machinery is seen on a popular level as a right .....and as an obligation of the state’ (Abu Shehab, 2000: 86). Some political analysts claim that this has created a condition in which the overwhelming majority of the middle-class almost entirely depend on the government for their livelihood and in return the government expects the middle-class to refrain from demanding any meaningful participation in the political affairs, thus securing greater internal political stability and perpetuating the rule of existing regimes (see for instance; Magnus, 1981; Crystal, 1992; 1995; Gause, 2000).

Today, nearly 90 per cent of Dubai’s economically active national middle-class are employed in the over-stretched public sector bureaucracy and semi-governmental establishments occupying positions such as administrative staff, engineers, accountants, army and police officers, teachers, physicians, journalists, civil clerks and a host of other jobs (Al-Bayan, 28/3/2005). Employment of nationals in the public sector has grown from as little as 70 in 1963 (Ghanem, 1992) to more than 21,715<sup>51</sup> in 2003 (Dubai Municipality, 2003), with an annual average increase of 3%, levelling with the annual increase in the national population. Table 4.2 presents the latest distribution of nationals’ employment in both local and federal bureaucracy in Dubai Emirate by gender.

**Table 4.2 Employment of nationals in the bureaucracy within Dubai Emirate (Local & Federal) 2003**

Gov. Level	Male	Female	Total
Local	10,450 (75%)	3,722 (48%)	14,172 (65%)
Federal	3,449 (25%)	4,094 (52%)	7,543 (35%)
Total	13,899 (64%)	7,816 (36%)	21,715 (100%)

*Source: Dubai Municipality, 2003*

<sup>50</sup> Magnus (1981) and Rumaihi (1978) include considerable assessment of the causes and manifestations of the new middle-class in the Gulf region.

Wages and work benefits in the public sector at both local and federal government departments and ministries follow a job ladder system that is based on the attained educational level, years of experience and type of position held. The current wage structure in Dubai Emirate for instance starts with AED 5,000 (\$1,500) a month for high school graduates on an entry level job, while an entry level university graduate receives AED 8,500 (\$2,316) a month. In addition, engineers and physicians are for instance paid an additional AED 1,500 (\$410) a month as a technical allowance in an effort to encourage more nationals to enroll in universities and study more technical subjects and then join the workforce in those fields where far fewer nationals are found. For similar reasons, the Abu Dhabi local government pays generous allowances for male school teachers in an effort to attract more national men to join as teachers (Al-Bayan, 28/3/2005). Every married employee in the public sector also receives AED 300 (\$82) a month for every child below the age of 18 regardless of the number of children. This allowance which was introduced in the early 1980s, intended to encourage nationals to have more children and thus increase the overall number of national population. Furthermore, those who are filling supervisory positions are paid special allowances between AED 200- 1,500 (\$55- 400). It is also worth mentioning, that the army generally pays higher wages, especially for entry level positions. This has encouraged many male citizens to discontinue their higher education and join the army in the hope of improving their economic status much earlier in life (Al-Bayan, 13/7/2004). Although currently UAE's public sector wages are the highest among all other Gulf states, local newspaper columnists often remind the government to consider increasing public sector salaries to meet the rising cost of living and personal debts.

Only 10 per cent of the actively working nationals are employed either by the private sector or are self-employed (Abdelkarim, 2001). Such low levels of participation of the national manpower in the private sector are mostly caused by higher wages and more favourable working conditions in the public sector. However, in view of increasing unemployment among young nationals in recent years and the saturation of the public sector jobs, the government has taken measures to open up further employment opportunities for nationals in areas such as finance, banking, insurance and tourism<sup>52</sup>

---

<sup>51</sup> The figure does not include individuals (mainly males) employed by the armed forces.

<sup>52</sup> Currently, nationals make up only 1 per cent of the total private sector workforce. Despite government's attempts to increase the participation of nationals in the private sector, it has only achieved marginal success. According to Kostiner (2000), this is caused by several factors; (1) the unwillingness on the part of the nationals to accept jobs that



(Gulf News, 12/1/2005). Furthermore, nationals are also encouraged to set up their own small scale businesses away from government employment. Programmes such as the Dubai's Young Entrepreneurs provide national men and women with low-interest business loans and market studies to be able to increase nationals' involvement in private investments.

In addition to the relatively high wages paid in public sector employment, nationals throughout the UAE also benefit from other income supplementing opportunities. For example, licences of all kinds of commercial, professional and industrial activities are only issued to UAE citizens and it is mandatory that branch offices of foreign companies must have a national sponsor. These laws have encouraged middle-class UAE nationals to participate in small-scale businesses and more often becoming involved in leasing their commercial license to expatriate entrepreneurs in return for annual increments of between AED 3,000 to 20,000 (\$817- 5,450), depending on the type and size of investment. This phenomenon is known locally as the '*sleeping partner*'.

Moreover, a considerable number of nationals in the UAE earn money to supplement their income through selling work permits and employment visas to expatriate workers<sup>53</sup>. On the average the national sponsor would receive an amount ranging between AED 3,000 to 10,000 (\$817- 2,725) per annum from the sponsored foreign worker, who will then be permitted to work legally in the country with other parties. Because of its exploitative nature, the government in the last few years had taken some steps to curb the misuse of the sponsorship (*Kafalah*) system. But, it is believed that this is still widely practiced among many middle-class nationals despite the stringent laws and penalties introduced by the government.

---

may be socially undesirable (2) nationals prefer government jobs because they provide higher wages, more convenient working hours and job security (3) local employers prefer foreign workers because they accept much smaller wages and tolerate harder work conditions; and (4) nationals usually lack technical and vocational training most needed for private sector jobs.

<sup>53</sup> According to UAE immigration and labour laws, every expatriate worker enters the country on employment visa must be sponsored by a UAE national or an officially recognized company or government institution.

## 4.8 HOUSING PROVISION POLICY IN DUBAI

UAE society, by virtue of its demographic composition, is classified into two general categories, nationals (*muwateneen*) and expatriates (*wafedeen*). Welfare policies, including housing policies are, therefore, very much linked to such classifications. As in the cases of health care, education and most other consumer goods and services, both local and federal governments in the UAE have adopted two different sets of policies with regard to the provision of the housing needs of the two groups. Nationals of course enjoy much more support through extensive subsidy programmes and they rely heavily on the government for meeting their housing needs. Expatriates on the other hand, mostly have to depend on their own resources and financial means.

### 4.8.1 HOUSING PROVISION OF THE NATIONAL POPULATION

Perhaps it is important to start with asking, why nationals' housing is extensively subsidised in the United Arab Emirates? The truth is that there is more than one answer to this crucial question.

First, from a political perspective, since oil was discovered and the nation was established in 1971, the government (i.e. both local and federal) have made explicit their mandate to ensure the provision of adequate housing to all citizens who can not meet their housing needs on their own<sup>54</sup>. As years went by, provision of free residential land and other forms of housing subsidy became powerful symbols of a wider *social contract* between the government and its citizens, in a political system where public participation in decision making is virtually non-existent. The ruler's policies of political domination have gone hand in hand with his commitment of providing basic needs of his citizens and in return he maintains legitimacy by continuing to provide subsidised housing and other services to his citizens (Gause, 2000; Crystal, 1992). Therefore, generous housing subsidies in an authoritarian rich oil state with relatively small population is critical for maintaining political stability and regime popularity (Crystal, 1995).

---

<sup>54</sup> Adequate housing has never been clearly defined, as latter discussion will show.

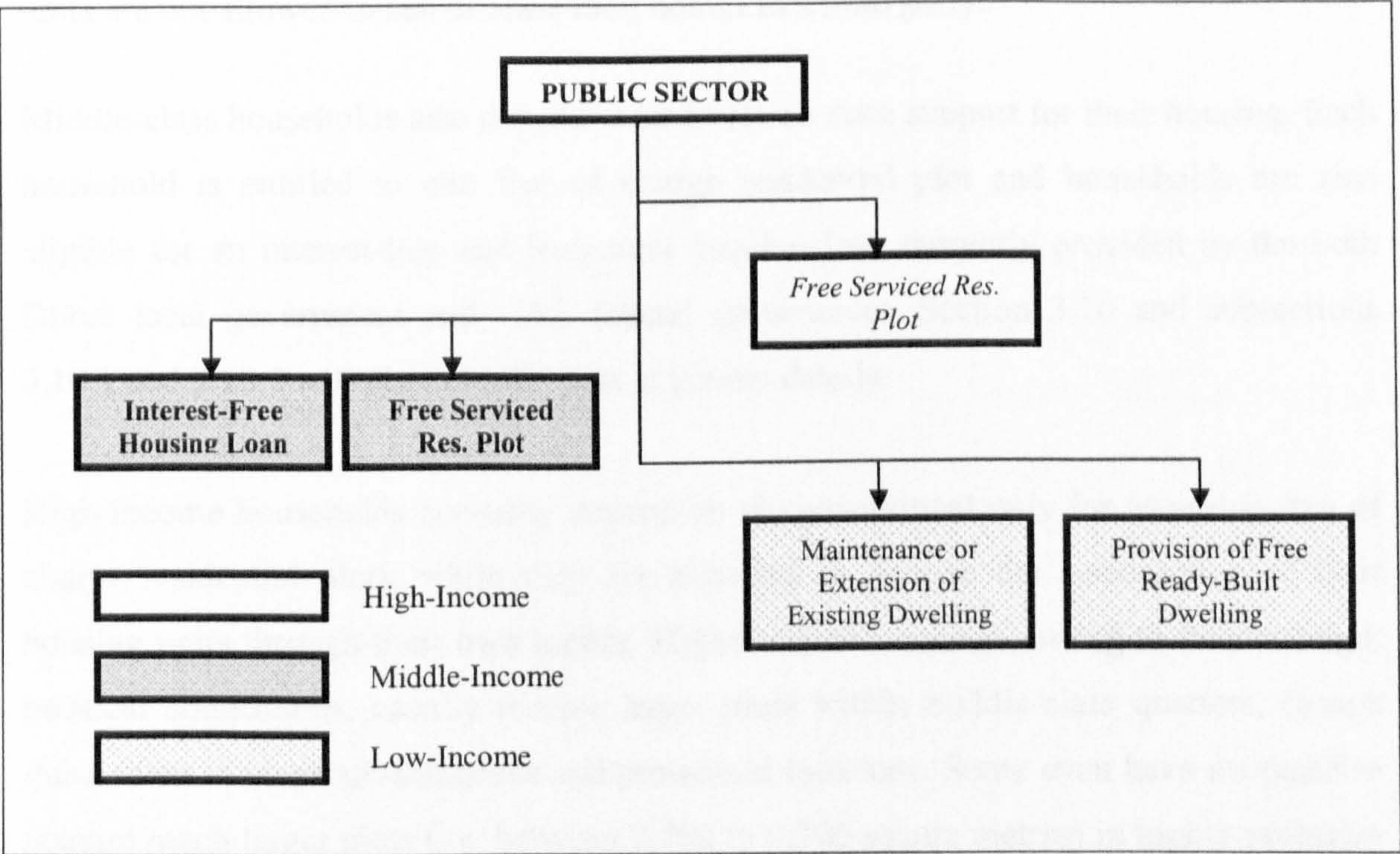


Second, the Rulers and their representatives, view the provision of generous housing and other consumer subsidies as an integral part of their distributive role and duty. Under this argument, the government, of course represented solely by the sheikh, assumes the new role of the distributor of the new God-given wealth. In fact, '[t]here is a lot of rhetoric about the role of the sheikh in "compensating" the people for what they had missed in earlier times when they were poor' (Abu Shehab, 2000: 73). This act of 'giving' is often labelled as a case of government benevolence, while others, such as state-owned media, even go further to call them sheikh's *makarem* or generous favours from the rulers to their subjects.

Over the past few decades, the provision of housing for the nationals in Dubai Emirate has gone through a number of phases. Before the discovery of oil, as the coming discussion will clearly illustrate, formal state involvement was almost non-existent and people were completely responsible for their own housing. Within the current housing policy context, as shown in figure 4.2, the government plays a pivotal role in the provision of housing to virtually all citizens. However, citizens of different income groups benefit from government housing subsidies in different ways (Dubai Municipality, 1993). Generally, the national households are classified into three broad income categories (1) low-income or better known as *al-dakhil al-mahdood* or people with limited income (2) middle-income, and (3) high-income (Sultan, 2002).



Figure 4.2 Current methods of housing provision for nationals in Dubai Emirate



Source: Author

Low-income households include those who receive monthly state social welfare assistance, low income widows or young orphan children and unemployed older citizens who do not have other sources of income. According to existing policy practices, any household that falls within this category is entitled to government housing assistance. There are two methods of housing provision that are used to satisfy the housing needs of this group. Since the early 1970s, the Dubai government has continued to provide either new and completely free of charge low-cost housing units or to extend and maintain existing housing units that are already occupied by a low-income household.

Periodically, small and medium scale housing projects of between 20 to 100 prototype housing units of two, three and four bedrooms, in addition to other amenities, are built by the government on plots between 280 to 465 square metres (Al-Bayan, 12/3/2004; Sultan, 2002). Once construction is completed, the houses are allocated to households who satisfy the eligibility conditions. Additionally, between 1994 to 2002, the government spent the total of AED 241,048,000 (\$65,668,000) on the maintenance and extension of around 1,250 dwelling units owned and used by low-income nationals



(Sultan, 2002). According to government regulations, owners of low-income housing units are not allowed to sell or lease their homes to a third party.

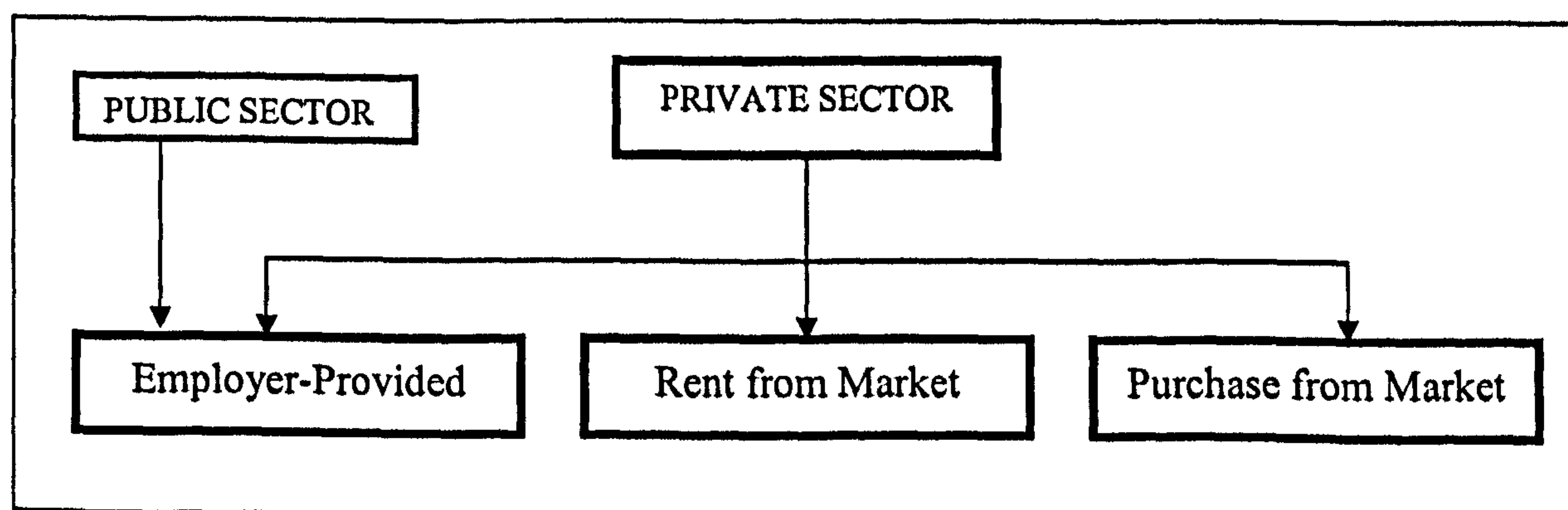
Middle-class households also depend extensively on state support for their housing. Each household is entitled to one free of charge residential plot and households are also eligible for an interest-free and long-term housing loan currently provided by the both Dubai local government and UAE federal government. Section 3.10 and subsections 3.10.1 and 3.10.2 will discuss this issue in greater details.

High-income households normally depend on the government only for acquiring free of charge residential plots, while they are expected to finance the construction of their housing units through their own means. Higher-income citizens, owing to their stronger political connections, usually receive larger plots within middle-class quarters, though quite often in more advantageous and prominent locations. Some even have managed to acquire much larger plots (i.e. between 2,790 to 9,300 square metres) in highly exclusive residential subdivisions. Upper income households usually build a single villa or a group of luxurious, huge and extremely elaborate villas that reflect their socio-economic status in the community.

#### 4.8.2 HOUSING PROVISION OF THE EXPATRIATE POPULATION

Unlike the nationals, the provision of housing for the expatriate population in Dubai Emirate is left almost entirely to the market. Currently, all expatriates living in Dubai obtain their housing through one of the three methods of housing provision outlined in figure 4.3.

**Figure 4.3 Housing provision of expatriates in Dubai Emirate**

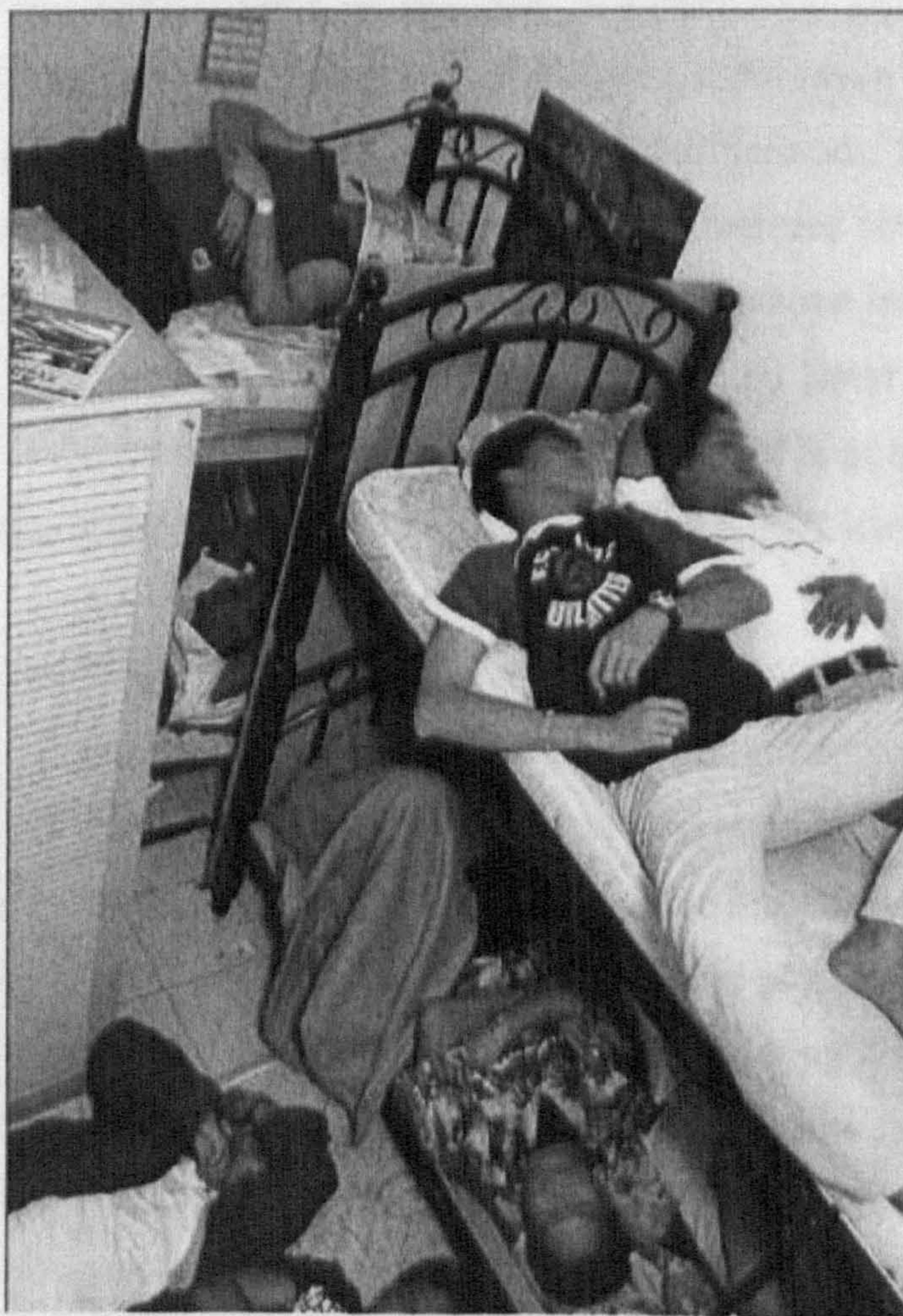


*Source: Author*



*First*, most government agencies and some private sector establishments provide their expatriate employees with accommodation as part of their work contract. In fact, public sector departments provide very generous housing packages to their professional and specialised technical and executive employees. They normally include furnished apartments or villas, free utilities and exemption from tenancy tax referred to as '*housing fees*'. Some government departments such as the Dubai Municipality and the Department of Health and Medical Services, have their own staff accommodation that is allocated to expatriate employees according to their ranks. Low-paid manual workers are also provided with basic housing, normally in purpose- built labour camps. In year 2000, 25.7 per cent of Dubai's expatriate residents lived in employer-provided accommodations (Dubai Municipality, 2000 a).

**Plate 4.2 Severe overcrowding in an expatriates' labour accommodation in Dubai Emirate**



*Source: Emirates Today, 1/3/2006*



*Second*, the larger proportions of the expatriate population have to rent their accommodation from the market. Most expatriates reside in apartments, but some also rent out the Arabic homes once occupied by the nationals in the older parts of the city. Higher income expatriates often live in detached villa units or in expensive apartments. Because of high housing costs relative to their incomes, most low-paid workers live in extremely crowded conditions, reaching in some instances up to 10 persons per room (Dubai Municipality, 2000 b). In some other instances, two or more unrelated households have to share a two or three bedroom apartment or old Arabic house.

To alleviate this problem, the Dubai government had initiated several schemes with the purpose of providing affordable housing to low and middle-income expatriate residents (Makki, 1990). In 1975, the Dubai Development Board (DDB) (*majlis al-immar*) was established by the government to build apartment rental units at subsidised price. Until year 2000, the DDB had managed to supply about 11,500 apartments, which constituted around 7.9 % of total housing stock for that year. A further 2000 apartment units of one, two and three bedrooms are now being built at different locations in the city in the hope of bringing down the staggering rental premiums<sup>55</sup>. Furthermore, the government has recently introduced a law that only allows landlords to increase rent after at least two years of leasing contract with their tenants. Despite all the above initiatives, the cost of rental housing is still considered high and many middle and lower income expatriates who work in Dubai are forced to live in neighbouring cities of Sharjah and Ajman where rent is approximately 30 to 55 per cent below Dubai levels (Gulf News, 12/3/2005).

*Third*, in 2002, the Dubai government partially removed restrictions on property ownership by the non-citizens. Expatriates can now own unlimited numbers of residential properties in specific real estate projects. Expatriates who purchase a residential property in Dubai are promised a life-time residence visa. Since the inception of this policy, about 20,000 dwelling units between small studios and one acre plot golf course villas have been sold to expatriates. Abu Dhabi Emirate is also considering allowing foreigners to own property in the capital city (Gulf News, 30/1/2005). Despite large sales of private properties, the Emirate has not developed any written laws regulating the rights and duties of property owners. The opening of private property ownership to expatriates has

led to the creation of a highly speculative housing market and sharp increase in the price of privately purchased housing units (Gulf News, 11/8/2004).

#### **4.9 MIDDLE-CLASS NATIONALS' HOUSING IN HISTORICAL PERSPECTIVE (from huts to mansions)**

The following subsections present a comparative overview of nationals' housing conditions in the historical context. The overview covers three distinctive and unique phases of housing development that have emerged and are influenced by changing economic, social and political forces. Special emphasis will be placed on major changes in key elements such as building materials, dwelling types and size. Furthermore, analysis will also include most noticeable historical transformations in housing space consumption among middle-class households. The three distinctive historical periods that will be discussed and analysed are; (1) the traditional pre-oil phase (2) the transitional post-oil phase and (3) contemporary post-oil phase.

##### **4.9.1 TRADITIONAL PRE-OIL PHASE (1900-1965)**

It has been mentioned that families in the local society of Dubai, as well as the rest of the United Arab Emirates before 1960s, were stratified according to their economic and political status. Analysis has clearly shown that in the traditional pre-oil economy the population of this region belonged either to the majority poor and deprived group or to the upper and affluent class with virtually no sign of any middle-class. In the absence of any form of official public assistance or housing financing and credit schemes, families had for most parts to rely on their own cash and labour resources to meet their housing and other needs. Therefore, their housing conditions strongly reflected the economic situation experienced by those families. In general terms, housing and houses of this particular period can be classified into two categories (1) houses of the poor and the working class, and (2) houses of the merchants and the ruling class.

---

<sup>55</sup> Most low and middle-income expatriates in Dubai Emirate pay between 35 to 45 per cent of their income for housing rent (Dubai Municipality, 1999).



#### 4.9.1.1 HOUSES OF THE POOR AND THE WORKING CLASS

The impoverished families in the towns and villages of the Trucial States could only afford living in makeshift houses built from palm-fronds known locally as *barasti*<sup>56</sup>. See plates 4.3 and 4.4 and figure 4.4. There is no documented statistics on the number or percentage of this type of dwellings in Dubai prior to 1968, however, visual analysis of aerial photographs taken in 1955 clearly indicates that over 70 per cent of homes existed then were *barasti* type. By 1968, there still were 4871 dwelling units made out of palm frond. This constituted around 41 per cent of Dubai's total housing stock (Trucial States Development Office, 1968).

*Barasti* homes which go back several hundreds of years, were least durable of all housing types found in the region owing to the organic and soft nature of the wood material used for building them. Fire, torrential rain and strong winds often posed serious hazard for *barasti* owners. Nonetheless, they were easy and fast to erect and dismantle, well-suited for the climate<sup>57</sup> and above all cheap to build (Al-Mansoori, 1997; Kay and Zandi, 1991).

Palm tree construction materials came from local sources as well as from the neighboring towns and villages. The simplicity of building methods required for this type of construction allowed people to rely on themselves, relatives and friends to fulfil the labour requirements needed to build a new family home or add an additional room to an existing one. On the average, a full two room dwelling of this type would require between two to three weeks to complete.

---

<sup>56</sup> This type of dwelling units is also known to *areesh*.

<sup>57</sup> Unlike stone or concrete buildings, *barasti* walls do not retain heat and therefore, cool down much more rapidly after sunset.

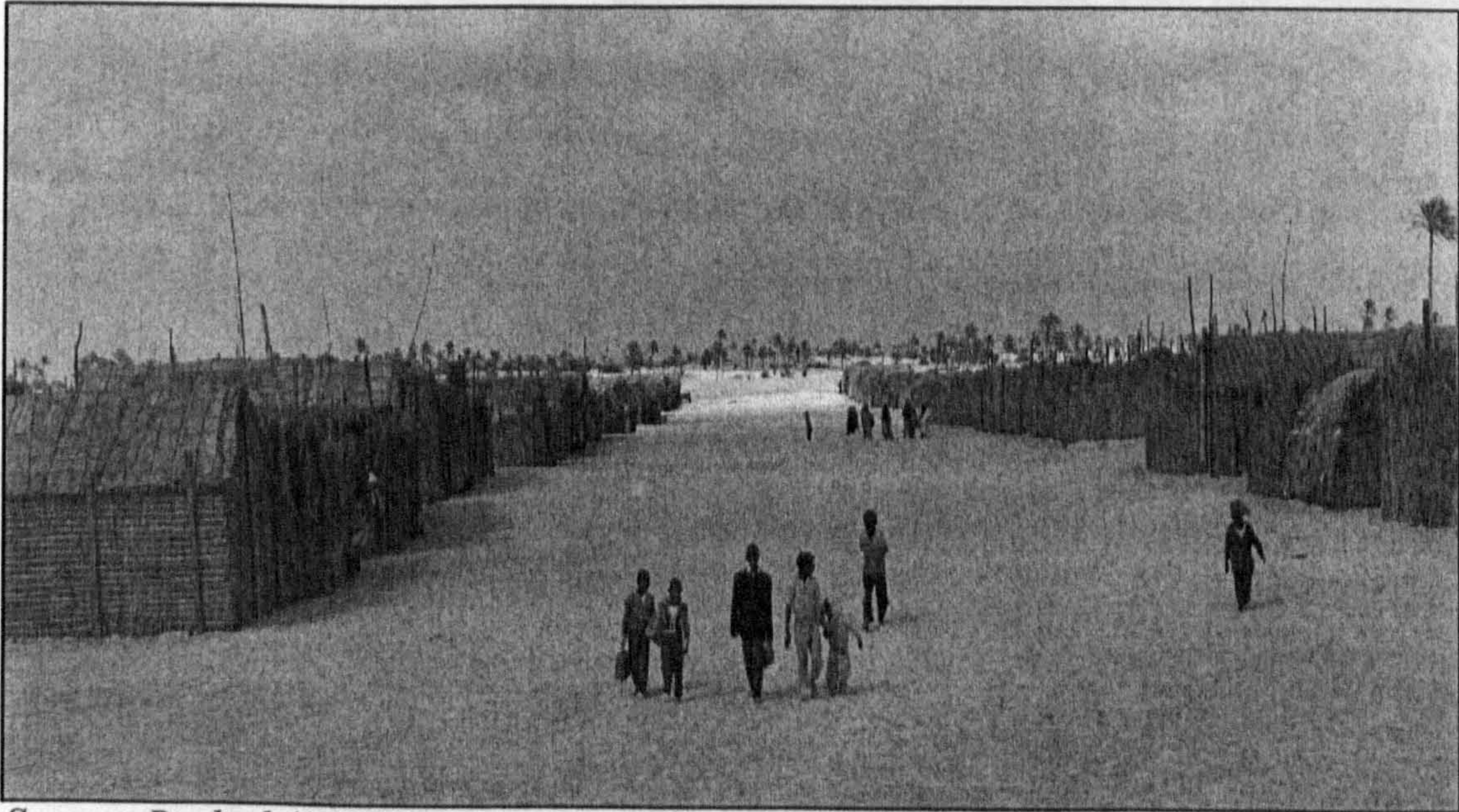


**Plate 4.3 Palm-frond barasti homes dominated the housing stock in the UAE well until the middle of 1960s**



*Source: Al- Fahim (1995: 112)*

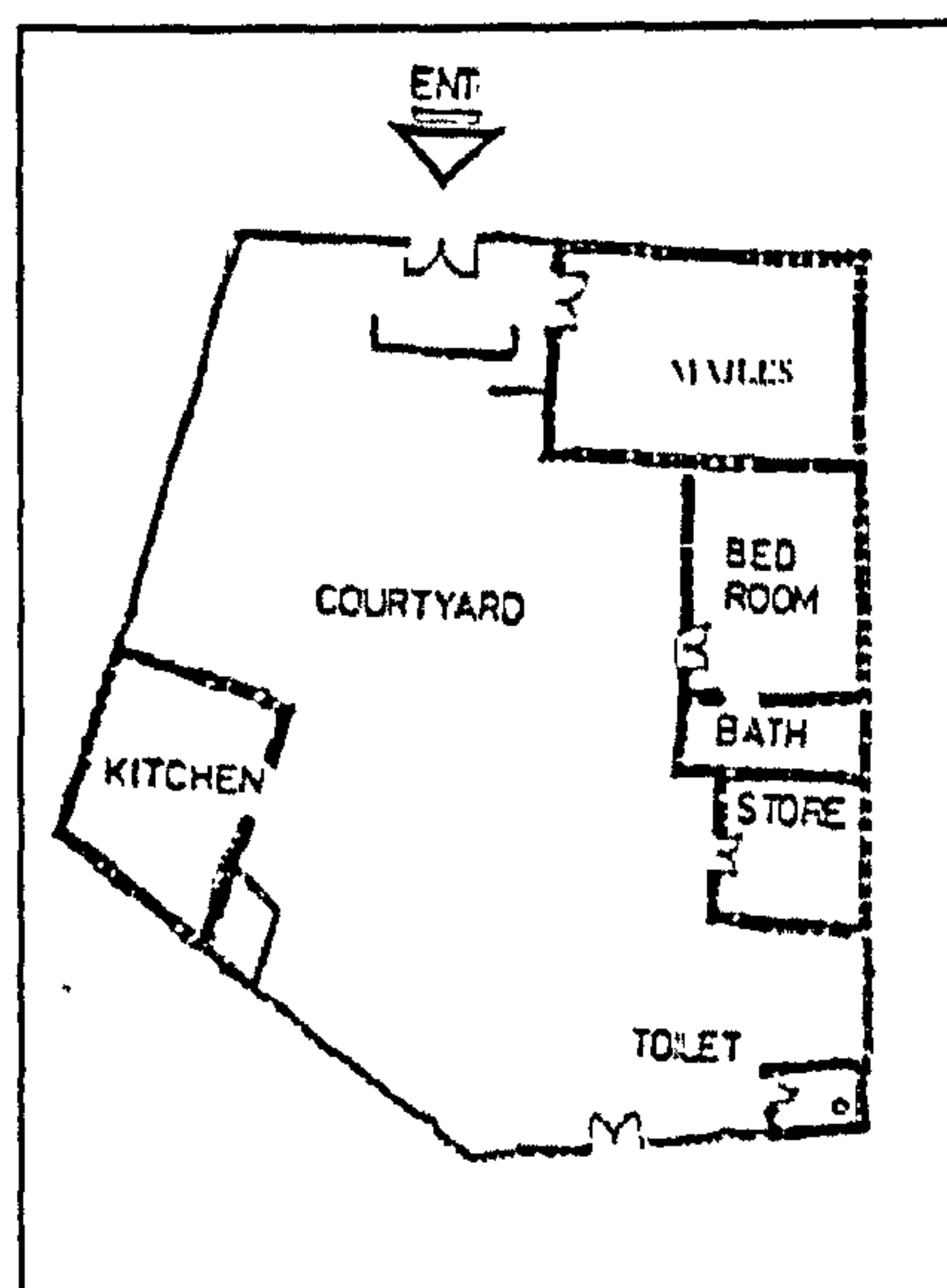
**Plate 4.4 Rows of barasti homes in Dubai in 1962**



*Source: Rashed (1997: 78)*



Figure 4.4. An example layout of a barasti dwelling in Dubai



*Source: Al-Mansoori, 1997*

The barasti dwelling units were built on open land which did not belong to anybody else in the community, although a permission from the Ruler was often needed before one could start building his home. Construction would normally start with identifying a boundary for the plot of land that was acquired for the purpose of building a family home and that was followed by the erection of a palm-frond fence that will surround the house to provide both privacy for the females in the home and to keep strangers and straying animals away from the inner parts of the house. Barasti rooms were based on a framework of mangrove poles, palm trunks or any other straight wood (Kay and Zandi, 1991). This framework normally results in a rectangular-shaped room with either flat or pitched roof (Kay and Zandi, 1991). The dimension of barasti rooms rarely exceeded ten by twelve feet owing to limitations posed by the length of wood used as framework in the building process.

The 1968 population and building census revealed that 49 per cent of the barasti homes had only one habitable room, 38 per cent had two rooms, 10 per cent had 3 rooms, 2 per cent had 4 rooms and 1 per cent had 5 rooms (Trucial States Council Development Office, 1968). Therefore, overcrowding among the low income barasti dwellers was widespread and a whole family of nine members was often crammed into one or two

barasti huts. Habitable rooms were for most of the cases multi-use spaces, whereby family members would sleep, dine, entertain and receive their guests in the same room. During the hot summer months, most families slept outside the rooms in search for a cool night breeze, while they had to huddle inside their barasti huts during the cold winter nights.

Because of their dire economic conditions, barasti inhabitants often had very few belongings and furniture items were simple and flexible allowing the family to maximize its use of livable domestic spaces. There was very little variation in the external appearance of one barasti and another, and home decoration was scarce and limited to floor mats and colourful cloths used to cover the surface of palm frond walls inside the rooms. Nearly every dwelling unit had a kitchen facility that would be usually kept as far as possible from the habitable rooms to avoid the risk of catching fire. A small food storage room was often built next to the kitchen for the purpose of storing basic durable food stuff like palm dates, dried fish, rice, cooking oil and flour. Cooking was always done using fire-wood in a specially made clay oven. An overwhelming majority of homes did not contain any bathroom or toilet facilities. Each owner of a barasti home had to pay the Ruler a monthly property tax of two Indian Rupees (Dubai Municipality, 1963).

#### **4.9.1.2 HOUSES OF THE MERCHANTS AND THE RULING ELITE CLASS**

Merchants (*al-tujjar*) and members of the ruling families (*al-shoyookh*) constituted the upper class and the elites in the local communities of the Trucial States. The merchants were mostly from Arab families who were traditionally involved in the pearling industry and later switched to other types of commercial activities. Some of Dubai's merchants, however, were immigrants from Persia and India who relocated their businesses to Dubai around 1910 (Heard-Bey, 1996). The ruling elites, on the other hand were estimated to be less than 2 per cent of the total population (Cottrell, 1981).

Naturally, the housing conditions of this class were much better than those of the poor working class, with regard to their durability, spaciousness and availability of domestic amenities and decoration. Like most of the upper class in the coastal towns of the Gulf, the merchants of Dubai used locally quarried coral stones as the main construction



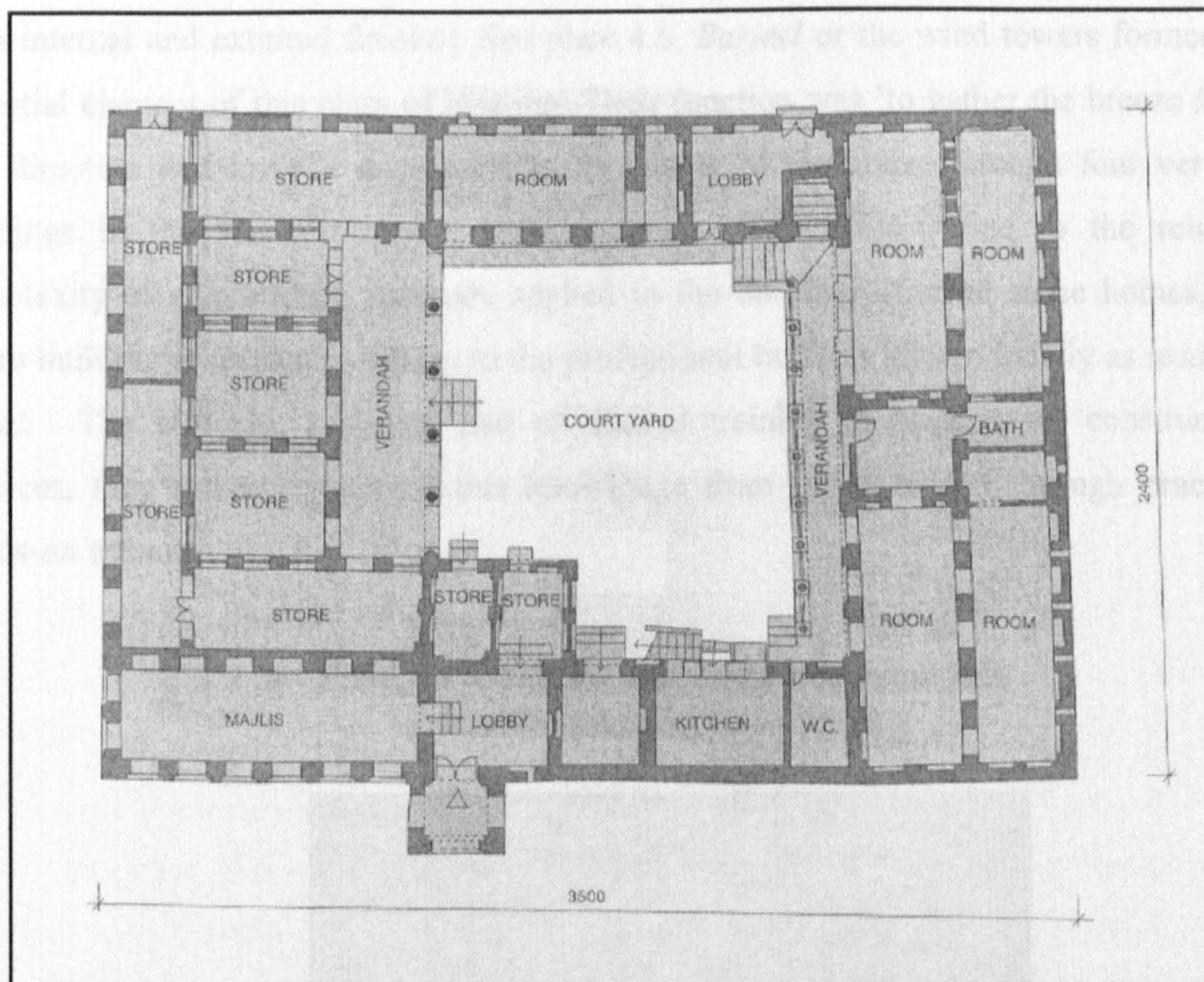
material for their homes. See plate 4.5 and figure 4.5. It is estimated that by 1955, around 30 per cent of Dubai’s housing stock were built with coral stone as the main building material. By 1968, it was reported that Dubai had 6189 housing units built from stone including manufactured concrete blocks which were introduced in 1956 (Trucial States Development Office, 1968). This figure adds up to around 51 per cent of the town’s total housing stock.

**Plate 4.5 The houses of the merchants with their famous wind-towers  
In pre-oil Dubai City**



*Source: Ramesh (1995:141)*



**Figure 4.5 A typical layout of a merchant coral stone dwelling in Dubai**

*Source: Dubai Municipality, 1998*

Old coral reefs found in the shallow basins of Dubai Creek and shores of the Gulf provided the blocks used for building the foundations and the walls of dwelling units. Coral stone walls were typically laid in three blocks thick reaching around sixty centimeters in width and then were set in gypsum mortar to produce stable, strong and well insulated load bearing walls (Al-Rustomani, 1991; Kay and Zandi, 1991). Mangrove poles and, to a lesser extent, tamarisk (referred to locally as *chandel*) had to be imported from East Africa and India for roofing purposes. Here again, the size of the room was very much determined by the length of the natural building materials that were available to the community. Kay and Zandi (1991: 16) have commented that;

*Mangrove poles were available in lengths up to only about 3.5 metres, and this played a major role in the design of Gulf's houses. The rooms could not be wider than the beams, and were generally long and narrow in shape.*



The houses of the merchants were comparatively highly decorative and ornamented with both internal and external finishes. See plate 4.6. *Barjeel* or the wind towers formed an essential element of this class of housing. Their function was ‘to gather the breeze from any direction and force it downward to the inside of the house through four vertical openings in the four directions’ (Al-Rostomani, 1991: 16). Owing to the relative complexity of construction methods applied in the building of coral stone homes, the entire building process was left up to the professional builders known locally as *ustad* or *banai*. The builders, however, had no formal training in building or construction sciences, they rather transferred this knowledge from father to son through practical hands-on training.

**Plate 4.6 A narrow and decorated room in a traditional coral stone home**



*Source: Kay and Zandi, (1991: 10)*

The layout plans for the houses including the internal spatial arrangements, sizes of the rooms and locations of doors and windows were all determined between the owner and the builder on site. In the traditional settings, rooms and roofed verandas (*liwan*) were



normally built around an inner courtyard (*huwei*) that provided shaded cool space in hot summer days and secured privacy for the family to be able to freely socialize<sup>58</sup>.

It is estimated that around 20 per cent of dwellings had 2 habitable rooms, 30 per cent had 3 rooms, 40 per cent had 4 rooms and 10 per cent had 5 rooms or more. Although, the internal spaces in this type of housing had more specific uses than those of the lower income groups, habitable rooms were still multi-functional. Every home had a kitchen where the meals were cooked using a charcoal fire. Furthermore, every dwelling unit contained between one to three toilets depending on the size of the home.

More prominent families often had bigger and more elaborate homes, in order to reinforce their socioeconomic status in the community. Traditional dwellings of merchants and ruling class which were built in one or two floors 'grew, bit by bit, as rooms were added when needed'<sup>59</sup> (Kay and Zandi, 1991: 9). Most of the houses were family residence, but some also served as the business quarters and commercial goods storages of their owners. A monthly property tax of four Rupees had to be paid against each coral stone house that existed in Dubai (Dubai Municipality, 1963).

#### 4.9.2 TRANSITIONAL POST-OIL PHASE (1965-1990)

In the 1960s, the Dubai local government under the leadership of its late ruler *Sheikh Rashed Ben Saeed Al- Maktoum* began to play more active roles in housing and urban development as public revenues started to increase and pressures on urban development were mounting. Municipal institutions like the Land Department (1960) and Dubai Municipality (1965) were also established to plan, manage and provide for the orderly growth and development of the City. In 1961, Dubai had its first long-range town plan prepared by John Harris, a British consultancy firm. Seven years later, the Municipality introduced the *Administrative Order Number 8 for year 1968*, which made the acquisition of building permits mandatory for every new construction project. A more

---

<sup>58</sup> The courtyard played a central role in the dwelling process of traditional communities. Here the family spent much of their time, the children could play while the women prepared the meals, did their domestic tasks or sat and chatted (Kay and Zandi, 1991). Some analysts argue that the traditional courtyard is the equivalent of modern-day living rooms (see for instance, Al-Hussayen, 1995).



comprehensive and strict building code was adopted in 1970 which required every construction project, including private homes to obtain a building permit and to submit architectural and structural drawings prepared by a licensed architectural design office for approval by the Municipality (Sultan, 2002). The code banned the use of palm-frond materials and prohibited new buildings to be occupied or supplied with water and electricity connections before the owner obtains a completion certificate from the Municipality. Furthermore, the Municipality building inspectors were granted the legal right to enter and inspect any construction site in the Emirate to check for compliance. This new building code gave the Municipality wider authority in controlling the development process in a city that was experiencing massive growth in population and economic activities.

Control and management of land ownership were also becoming very important in view of increasing pressures on physical development and disputes over land ownership claims. Once land ownership was determined in older built-up parts of the town, it was accepted that all land outside the built-up areas belonged to the Ruler and he was given the ultimate authority over it (Heard-Bey, 1996). This had given the government unrestricted control over the supply of land and to a great extent the determination of its use and value.

With the huge improvement in the economic conditions, most low-income families started incrementally to replace their old barasti homes with more permanent structures built of cement and sand blocks<sup>60</sup> (Makki, 1990). See plate 4.7 and figure 4.6. The roofs were typically composed of wooden joist and plywood sheets covered with cement-sand mortar (Al-Mansoori, 1997). The courtyard style dwellings<sup>61</sup> continued to dominate, however, in 1963 the first villa-type dwelling was built in Dubai using an entirely new construction method of reinforced concrete and steel structure. Most affluent and upper income households substituted their coral stone homes with modern style villas that were built on the outskirts of the town. Multi-storey apartment blocks were also built to cater for housing needs of the burgeoning expatriate population.

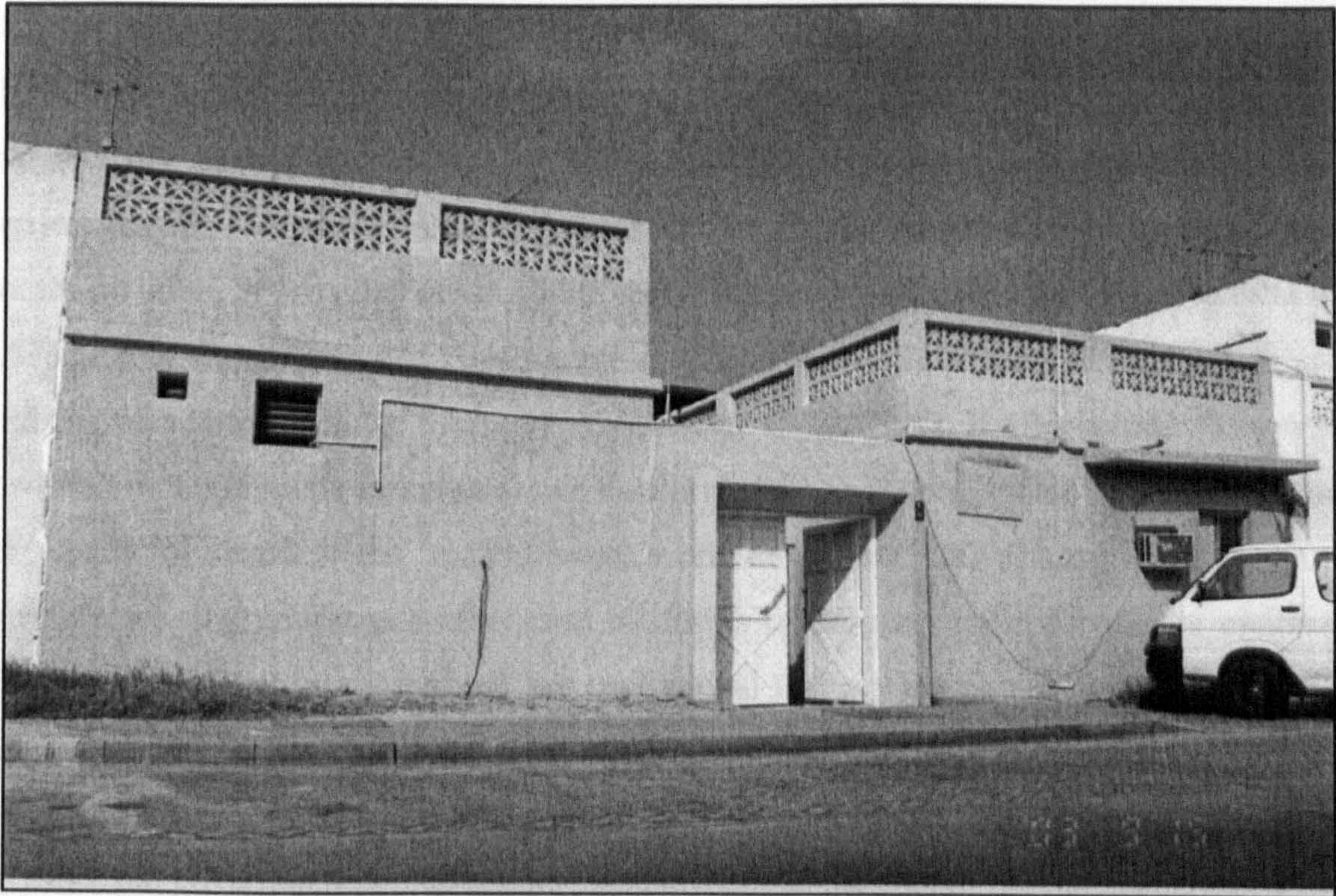
---

<sup>59</sup> For instance, the family home of late *Sheikh Saeed Al-Maktoum* the former ruler of Dubai was extended more than four times over a period of nearly thirty years.

<sup>60</sup> Barasti homes have disappeared completely since 1974 and today no traces of them exist.

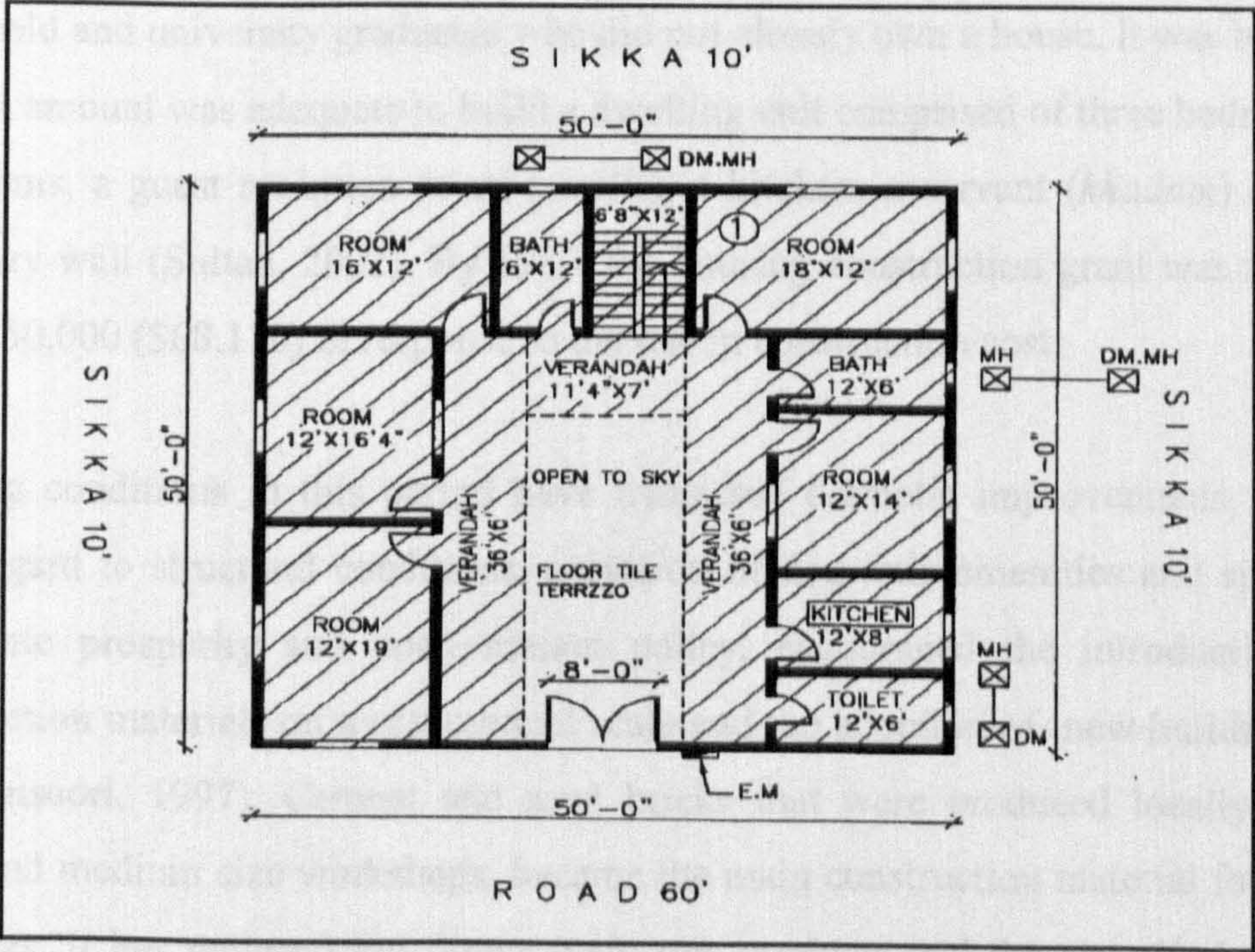


Plate 4.7 An Arabic courtyard house that was built in 1976



Source: Fieldwork, 2003

Figure 4.6 A typical layout of a transition courtyard dwelling in Dubai



Source: Dubai Municipality, Building Department

<sup>61</sup> The courtyard style dwellings were formally named as *Arabic Houses* in order to distinguish them from new types such as villa, apartment and other types of housing units.



In 1970, the government became directly involved in the provision of housing to its national population. Free serviced residential plots of 232 square metres (50X50 feet) in planned residential neighborhoods were granted by the Ruler's Court to each household that did not already own a home (Sultan, 2002). The newly emerging middle-class households were expected to depend on their own financial resources for building their homes on publicly provided land. Additionally, the government also provided the total of 3,576 free of charge low-cost housing units to the low-income households who could not find the means to build their homes (Al-Khaleej, 13/12/2000). It also helped some 660 low-income households to extend their dwelling units to accommodate additional needs for space or carried out maintenance work for them (Al-Khaleej, 13/12/2000). Furthermore, the government abolished all forms of property taxes for all the national population, while it introduced a 5 per cent annual tenancy tax on all expatriates renting residential premises in Dubai.

In 1984, the government increased the standard size of the free of charge residential plots by three times to 929 square metres (100X100 feet). Moreover, a policy of free housing grant was instigated. A lump sum of AED 200,000 (\$54,496) was granted to low-income household and university graduates who did not already own a house. It was believed that such an amount was adequate to build a dwelling unit comprised of three bedrooms, three bathrooms, a guest reception room (*majlis*), a kitchen, a servant (*khadam*) room and a boundary wall (Sultan, 2002). By 1989, the housing construction grant was increased to AED 250,000 (\$68,110) in response to the rise in construction cost.

Housing conditions in this period have witnessed dramatic improvements, particularly with regard to structural conditions, provision of domestic amenities and spaciousness. Economic prosperity and open market policy, encouraged the introduction of new construction materials on a commercial scale and the adoption of new building methods (Al-Mansoori, 1997). Cement and sand bricks that were produced locally by several small and medium size workshops, became the main construction material for all kind of buildings. It has replaced the flimsy palm tree products and the already depleted coral stones which were used for several hundreds of years in the region. Other new construction materials such as glass, aluminum window frames, mosaic tiles, ceramics and paint were also introduced and widely used in housing construction.



Another significant feature of housing in this transition period was the obvious increase in the size of dwelling units. The median dwelling size had reached 220 square metres (Dubai Municipality, 1986), an increase of around 60 per cent from the average size of dwellings found in the traditional phase. Improvement of economic conditions and provision of housing subsidies had allowed households to literally double their housing consumption. The domestic floor space per person had reached 31 square metres compared to only 15 square metres in the previous phase (Dubai Municipality, 1986; 1993). Such an increase in housing space was instrumental in improving the personal privacy and comfort of household members (Dubai Municipality; 1986). Occupancy rates per room dropped from 3.2 in the traditional housing settings to 1.6 person per habitable room (Dubai Municipality, 1986).

Virtually all homes were provided with electricity, running water and wastewater disposal systems. Air-conditioners became widely available and used in homes of people of all classes (Fenelon, 1973). In 1971, a state owned television station started its transmission and, soon after, imported television sets became essential parts of household belongings. Other basic modern home appliances such as washing machines, gas cookers, vacuum cleaners and refrigerators also became widely used by most middle-class households and by much fewer low-income households. New furnishing items such as full bedroom sets (double or king size bed, closets and dressing tables), television cabinet sets and, to a lesser extent three-piece suites were becoming popular in most middle-class homes.

By the early 1980s, nearly 20 per cent of middle-class national households had female Indian and Sri lankan domestic servants (Al-Khaleej, 17/2/1998). Most homes did not contain special rooms for servants. Hence, it was quite common for servants to sleep in the kitchen or under the staircase or even share a bedroom with the female children in the household.

### **4.9.3 CONTEMPORARY POST-OIL PHASE (1990- TO DATE)**

In 1989, the government decided to once again increase the standard size of the freely granted serviced residential plots to 1393 square metres (100X150 feet). A year later, the



free housing grant was abolished due to its high cost and the burgeoning number of applicants. Year 1993 witnessed a major shift in housing policy when the Dubai government decided to move away from free grants to interest-free long-term housing loans. Similar schemes already existed in Abu Dhabi Emirate, Kuwait, Bahrain and Saudi Arabia<sup>62</sup>. The Dubai government established an interest-free private housing mortgage programme targeted at the middle-income nationals of Dubai Emirate. The programme known as the Private Housing Finance Scheme (PHFS) offered soft interest-free housing loans of up to AED 500,000 (\$136,240) with a payback period of 25 years to successful applicants for the purpose of building their private homes on plots granted by the government. In 1999, the UAE federal government also instigated the Sheikh Zayed Housing Programme which also provides AED 500,000 long-term interest-free housing loans to nationals throughout the UAE.

In the contemporary phase, all dwelling units are built as one or two floor detached villas with setback requirements from all sides<sup>63</sup>. Both traditional building methods and architectural styles are now completely abandoned. Because of Dubai's building code requirements, reinforced steel and concrete structure have become the most popular construction method used today. Moreover, unlike houses of the traditional and transitional phases which were built and extended incrementally, contemporary villa units are built all at once and as a final product. The introduction of new, foreign and hybrid architectural styles and various new finishing materials in the contemporary phase has helped in diversifying the external appearances of private homes. The use of modern construction methods and materials has also encouraged owners to personalize their home design features and emphasize individual taste and preferences.

However, the most striking characteristic of the contemporary middle-class housing is the huge increase in the size of both the dwelling units' built up area and the land plot. See plate 4.8. According to the findings from a sample survey carried out as part of this study, the median size of contemporary dwelling unit is 443 square metres. Dwelling units have doubled in size from the previous transition period. Owing to increasing dwelling size and declining household size, the rates of household space consumption have sharply

---

<sup>62</sup> While Abu Dhabi and Saudi Arabia introduced interest-free housing loans, Bahrain and Kuwait both imposed an interest rate that was much below market rates.

<sup>63</sup> Current planning laws in Dubai require a minimum of 10 feet setback from all sides.



increased by 2.3 times, from 31 square metres per person in the transition phase to 71.5 square metres. Such huge increase in dwelling size has led to a considerable drop in occupancy rates to a low figure of 0.6 person per room.

**Plate 4.8 A contemporary middle-class villa-type dwelling in Dubai**



*Source: Fieldwork, 2003-2004*

Domestic spaces in the contemporary dwellings have become more numerous and highly specialised. Unlike previous times, each room in this phase has its very specific and mostly single use. The rooms are normally furnished with very bulky and specialised furnishing items which make them less flexible in terms of use. Not only are rooms in general now much bigger, but new types of rooms, such as dining-rooms, servant's room, pantries, dressing rooms, sitting/ reading rooms, female guest reception rooms (*majlis*), utilities' rooms, storage rooms, hobby rooms and children playing rooms have also become widely integrated into most of the contemporary middle-class homes in Dubai (for greater details see chapter five).

International comparison of housing indicators reveals that middle-class citizens in Dubai Emirate currently enjoy one of the highest rates of housing consumption around the world. Per capita space consumption in Dubai, which has reached 71.5 square metres, is



higher by 2.3 times than the overall per capita mean of high-income countries which is recorded in 1990 at only 31.4 square metres and is also more than double that of the mean per capita in industrialised countries at 34.5 square metres. (For further city level comparison see Angel, 2000; Flood, 1997).

Table 4.3 summarizes the extent and magnitude of change in the three historical phases with regard to dwelling unit size and relevant space consumption indicators.

**Table 4.3 Comparative summary of dwelling size and rates of housing consumption for the three phases**

Phase size	Median plot size (sq.m.)	Median dwelling (sq.m.)	Mean floor space/ person (sq.m.)	Mean person/ room
Traditional *	232	135	15	3.2
Transitional**	367	220	31	1.6
Contemporary***	1,185	443	71.5	0.6

\* calculated from data in Farman (1982).  
\*\* based on data from Dubai Municipality 1986 and Dubai Municipality 1993  
\*\*\* based on a sample survey conducted in 2003 as part of this study

Appendix 6 presents a summary of major historical events in the nationals’ housing provision policy in Dubai Emirate between 1958 and 2004.

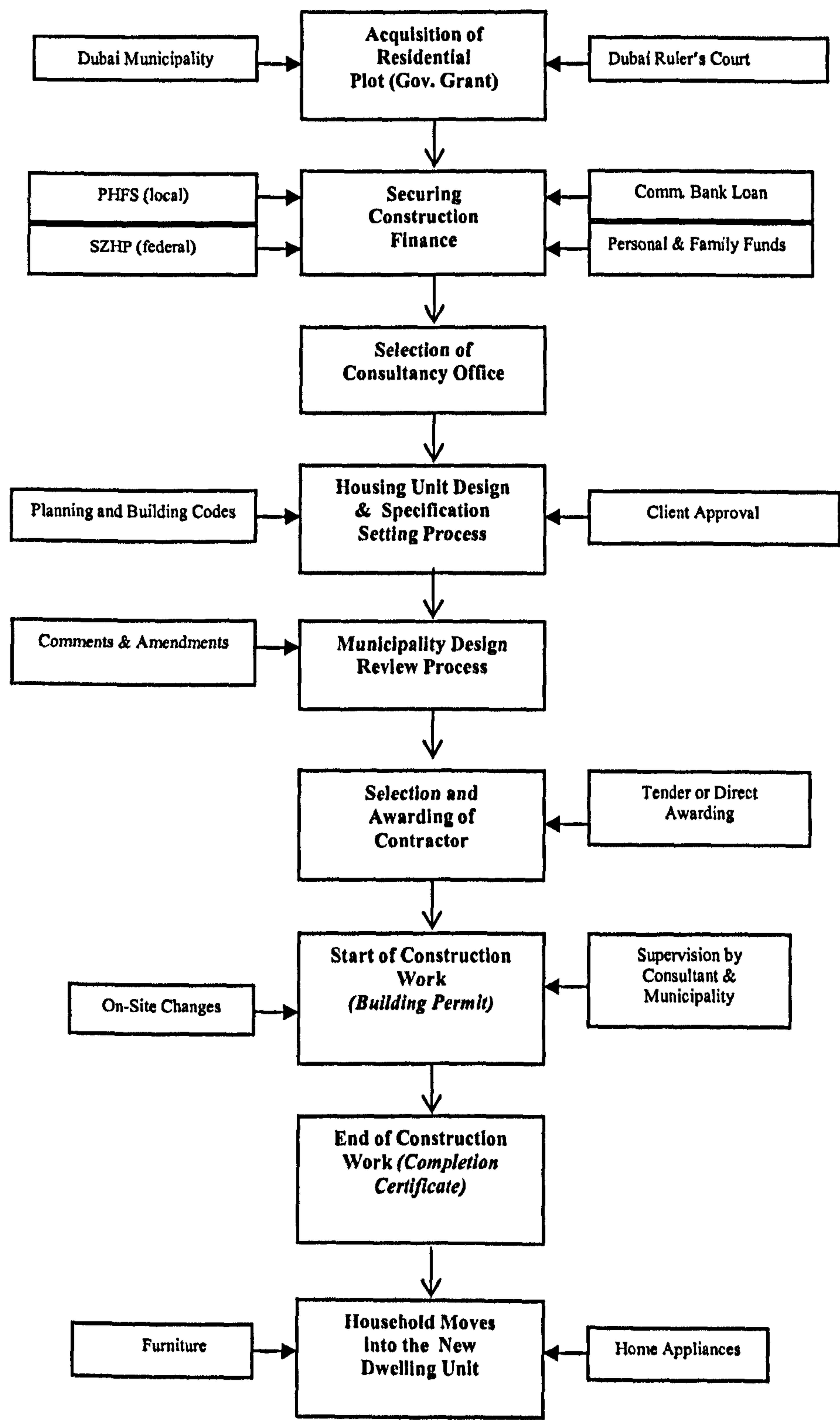
**4.10 CONTEMPORARY HOUSING DEVELOPMENT PROCESS AND KEY INSTITUTIONAL ACTORS**

Understanding the housing development process and the specific roles and policies of each involved stakeholder from both the public and private sectors are important prerequisites for the successful examination of major housing issues and trends (World Bank, 1993). Therefore, the remainder of this chapter intends to detail out the major steps in the housing process and identify the key stakeholders and their specific roles in the housing provision process within the context of the study population. Figure 4.7 shows

the general housing development process by illustrating the key components of this process and their various inputs.



Figure 4.7 The general process of private dwelling development



Source: Fieldwork , 2003-2004

As shown in figure 4.7, the private housing development process involves nine major steps which are:

*(1) Acquisition of a residential plot:* the housing development process always starts with securing a residential plot by the potential homeowner. A request for a household plot of land must be submitted to the Ruler's Court. Once documents are checked and proven that the individual has not already been granted a plot before, the Court issues an order from the Ruler to the Dubai Municipality to issue a free of charge residential plot in districts designated for single-household nationals. The Municipality then starts the process of allocating the plot to the person who is referred to in the order. This step may take between one week and two years depending on availability of plots in preplanned areas and personal connections and influence.

*(2) Securing housing construction finance:* the second step and perhaps most important one is to secure a major source of housing construction finance. Middle-class households depend primarily on government interest-free housing loans provided through the Private Housing Finance Scheme (PHFS) financed by Dubai local government and the Sheikh Zayed Housing Programme (SZHP) financed by the UAE federal government. As discussion in chapter five will show, most homeowners normally supplement the payment of their construction cost through additional personal loans from private commercial banks and personal and family savings. The average waiting time for government housing loan has continued to rise over the past few years and has now reached seven years.

*(3) Selection of a private consultancy office:* once land and the major bulk of the housing construction funds are available, the prospective homeowner begins the process of selecting a private consultancy design office. The selection of the consultant is based on many different principles. People often rely on the advice and recommendations of friends or relatives who either have built their own homes previously or have developed an idea about the quality and reputation of some consultancy firms through what they hear from others. Some potential homeowners drive around areas where houses are being built and look for designs that they think are impressive and satisfy their taste and accordingly they begin contemplating hiring one of those whom they choose as a result of their site visits. Others, simply look for the offices that charge minimum fees. So far, no



attempts have been made to compile and publish information on the quality, size and experience of operating consultants in the Emirate.

(4) *Housing unit design and specification setting process*: after a consultant has been chosen, both the client and the design architect representing the office start meeting to discuss the design requirements of the client. Some married clients involve their spouses directly in the discussion with the architect during housing design stage, while others, and for cultural reasons, discuss with their wives separately and then explain their wives' wishes to the architect. In addition to their spouses, clients also actively seek the opinions and views of other individuals on their design proposals, such as relatives and friends. According to most of my informant architects, such practices cause numerous changes in the design and prolong the time spent on designing private homes. The design process could take between one month to one year depending on how can the client quickly decide on a final design. However, most clients manage to reach a conclusive decision in less than six months after which the consultant then prepares all necessary drawings for client approval and signature.

(5) *Municipality design review process*: after getting client's approval, it is the responsibility of the consultant to submit all the required design drawings to the Buildings' Department in the Dubai Municipality for formal review and approval purposes. The Department is responsible for examining matters relating to architectural, structural and utility systems included in the submitted design. Municipality architects and engineers make sure that proposed designs are well within the minimum and maximum requirements specified in the building and city planning codes. For example, building height, setback requirements, minimum room sizes, adequacy of circulations, ceiling height, heat exchange drawings and calculations and various other structural design requirements. If designs were found not to be in compliance with concerned laws and regulations, the consultant will be required to make necessary changes with the knowledge of his client. Otherwise, if design is acceptable, the drawings will be approved for execution. Currently, this process takes only between two to five working days depending on the overall work load and design complexities.

(6) *Selection and award of contractor*: Once the design is officially approved by the Municipality, the search for a building contractor starts. Typically, the client along with



his consultant will come up with a list of nominees whom will then be supplied with copies of drawings and design specification and then asked to participate in a bidding competition. If satisfied with the bidding outcome, the decision will be normally taken to award the contractor with the lowest bid. Otherwise, if the client thinks all bids are high, then they start a price negotiation process in the hope of reducing the prices further. If a consensus is reached, the contract will be awarded to the selected bid. There are cases however, where clients appoint a contractor directly and without going through a tender process. If the consultant is not very confident about the ability of the selected contractor in performing the contract requirements, he may formally notify the client that he will not bear responsibility if things were not going as outlined in the contract. The selection and appointment of a contractor is inaugurated by the signing of the contract which spells out work requirement and remuneration schedule broken down into various stages. The length of this process varies from case to case. The whole process may take between two weeks and three months.

(7) *Start of construction work*: after signing of the project contract, the contractor approaches the Dubai Municipality with a copy of pre-approved sets of drawings and other documents for building permit and final and exact plot demarcation. He also applies for temporary water and electricity connections for use during the construction period. Construction work normally starts a day or two after permit is granted and water is supplied. During the construction stage which normally takes between 12 to 18 months, municipality building inspectors visit the site two to three times to check for compliance with conditions. The consultant, however, is required to follow up with work progress on an almost daily basis. Most owners introduce minor and sometimes even major changes to the design of their homes during construction. Such amendments often lead to delays in work progress and increase the cost of the original contract.

(8) *End of construction work*: at the end of construction work and if the client and the consultant are satisfied with the work, the contractor is allowed to pursue his request for completion certificate. A municipality building inspector and an electrician from Dubai Electricity and Water Authority will inspect the completed housing unit and if satisfied will proceed to issue a completion certificate which means that work has been satisfactorily completed. The owner can then officially apply for permanent water and electricity connections. This process takes around five to ten days.



(9) *Household moves into the new dwelling unit*: in the final step of this process, the household begins the journey of furnishing and supplying the new house with necessary items and appliances. As discussion in later chapters will show, households often spread the cost of getting their homes fully furnished over time because of high cost and strained household finances as a result of house construction. Another apparent reason for delaying the furnishing of new houses is that many of the spaces in the homes are not needed for immediate use by the household.

#### 4.10.1 LAND ALLOCATION POLICY AND REGULATIONS

Free access to serviced residential land has been a central component in Dubai's housing provision policy since 1970. Despite its high cost, the government has continued to guarantee every Dubaian head of household a housing plot and it has so far managed successfully to fulfil its commitment. All male citizens who hold UAE nationality issued from Dubai Emirate are eligible to apply for a plot as soon as they get married or reach the age of 25 and prepare to establish their independent household. This policy quite clearly encourages homeownership and reinforces the nuclear family pattern of living. Although it is not the government's policy to encourage female citizens to live independently from their relatives, there are special cases where single mothers and widows from middle and upper income groups have also been granted residential land to help them set up their separate housing units.

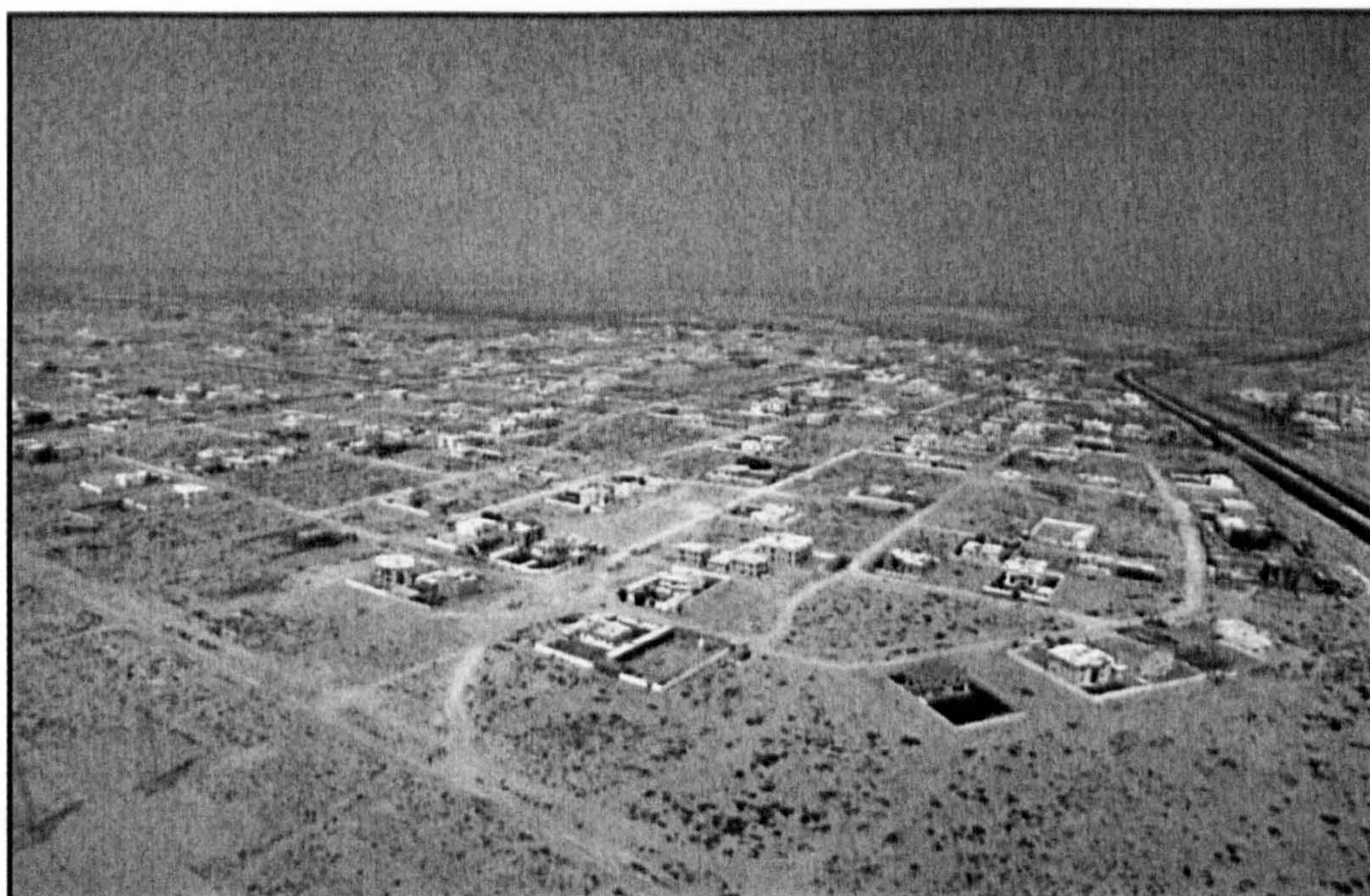
According to local laws and regulations, the plot is granted strictly for direct household use and the owners are not allowed to sell or lease the land or any buildings that exist on the granted plot. The reason is because the government wants to prevent any possibilities for the misuse of the land intended to be used for sheltering a national household. Several of my informants among the government officials have revealed that, before this restriction was introduced in 1982, a number of owners sold their homes and forced their wives and children to live in substandard rental accommodations or moved in with close relatives and forced their children to live under crowded conditions. Some even used the money to marry another wife or lost their money in unsuccessful business ventures. Quite often those people went back and approached the government for another chance. Such situations had led previously to undesirable embarrassments for both the nationals and the

government. The official rationale is then to protect the whole household from wrong or poorly thought out decisions that can be taken by the head of the household to whom the land is issued. All seven emirates have similar laws, however Abu Dhabi Emirate has recently adopted a new law that allows the sale of granted residential land or housing units only after five years from the original date of allocation. According to this new law, it is mandatory that each individual who plans to sell his granted land or housing unit must sign and submit an official statement indicating that he will not approach the government for another residential plot in the future as he had already been granted one earlier (Al-Bayan, 6/3/2005). Five months later, local newspapers announced that the Abu Dhabi government has suspended the law pending further evaluation (Al-Bayan, 22/9/2005).

The standard size of residential plots increased from as little as 232 square metres in 1970 to 929 square metres in 1984 and finally to 1393 square metres in 1989. Government's rationale for such huge increases in the size of plots was to allow households the opportunity to meet their housing needs without any constraints. However, only one full dwelling unit is allowed to be built on a single plot. Such large size plots and building restrictions have resulted in creating areas with extremely low densities. In fact, the low density housing land allocation policy was identified as the direct cause of the prevalent monotonous and high-cost suburban sprawl pattern of development that dominates a large part of Dubai's urban landscape today (Alshafiei, 1997).



**Plate 4.9 An aerial view of a sprawling middle-class suburban housing development in Dubai**

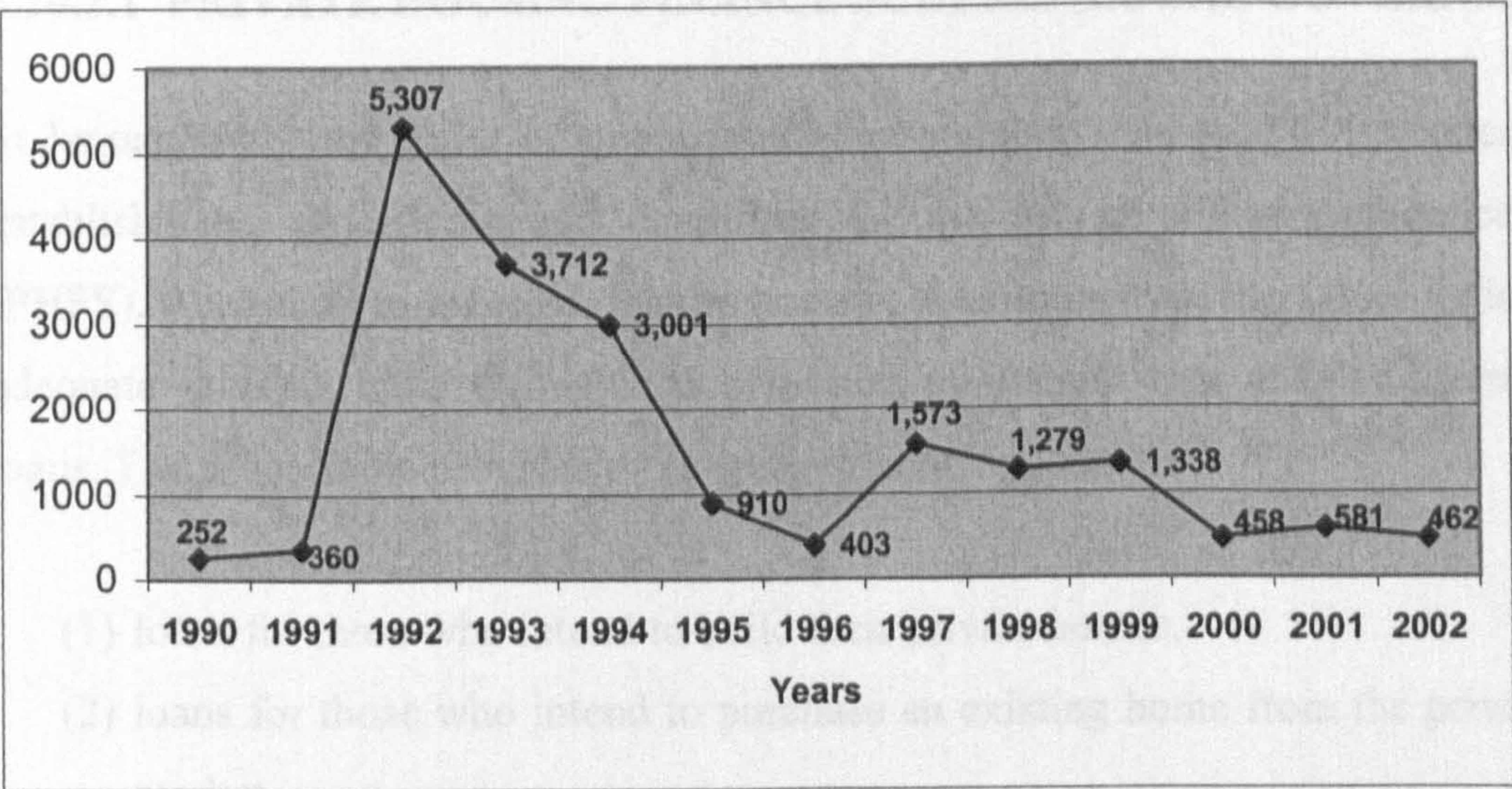


*Source: Dubai Municipality, 2004*

Currently, net densities in the nationals' middle-class housing districts average at 5.6 housing units or 35 persons per hectare. The average cost of providing each single plot with basic services (i.e. roads, electricity, water, sewerage and telecommunications) was estimated in year 2000 at AED 300,000 (\$81,745). Between 1989 to 2002, the government has allocated 20,419 plots. See figure 4.8. Around 26 per cent of all the plot (i.e. 5,307) were allocated in a single year of 1992. On the average the government has managed to allocate 1,459 plots each year since 1989.



**Figure 4.8 Annual distribution of granted serviced residential plots (1990-2002)**



Source: based on data in Sultan, 2002, p 268

Because of government’s decision since the late 1980s to distribute such large number of large residential plots, the larger proportion of them remained undeveloped for several years. This was caused primarily by people’s inability to secure adequate funds to build their homes immediately and the long waiting times for government’s housing loans (Al-Bayan, 13/7/2004). In the hope of reducing wastage in public investment in high-cost services and to encourage plot owners to start building their private homes on government-provided residential plots, the Planning Department of the Dubai Municipality advised the Ruler’s Court to issue an ultimatum to those who have not utilised their plots to do so or otherwise their plot will be withdrawn. On that advice, the Ruler’s Court issued an order in February 2000 in which it gave all plot owners a maximum time of five years to develop their plots. The order which was received with noticeable public disapproval also indicated that those nationals who may lose their plots as a result of the implementation of this order will reserve their rights to receive another plot later in accordance to local government procedures. Realizing that households’ access to government housing finance was becoming even more difficult by longer waiting lists, in July 2004, the Ruler’s Court issued a revised order allowing another five years opportunity for those who did not manage to build their homes on the granted plot.



## 4.10.2 HOUSING FINANCE INSTITUTIONS AND PROCEDURES

### 4.10.2.1 PRIVATE HOUSING FINANCE SCHEME (LOCAL GOVERNMENT)

In January 1993 the Ruler of Dubai issued law number 1 for year 1993 concerning the establishment, procedures and conditions of the Private Housing Finance Scheme (PHFS). According to article 4, the programme aims to provide the Dubai nationals with adequate housing units through the provision of interest free and long-term housing loans. The programme provides three types of housing loans;

- (1) loans for those who intend to build their private homes.
- (2) loans for those who intend to purchase an existing home from the private market.
- (3) loans for those who intend to maintain or extend their current homes.

Article 8 of the same law set the upper limit of the amount of an individual loan for the first two types (i.e. the construction of a new house or purchase of an existing house) at AED 500,000 (\$136,240) while the upper limit for the third type (i.e. housing unit maintenance and extension) was fixed at AED 300,000 (\$81,744). The AED 500,000 according to the PHFS officials was determined on the basis that it was perceived to be sufficient for building an adequate housing unit that could meet the needs of national households. Despite the fact that the entire scheme is centered around the objective of providing *adequate* housing that meets the *needs* of national households, neither adequate housing nor housing needs have been sufficiently defined. The only definition that was provided by a top programme official was that an adequate house meant that the house is built of modern materials (i.e. cement bricks and reinforced concrete structure), suitable for the size of the household both in terms of number and size of rooms and provided with adequate services. Despite covering very important aspects of housing quality, this definition falls short of suggesting any meaningful and measurable thresholds. The policy is obviously concerned with ensuring that households are enabled through substantial government subsidies to consume adequate amounts of housing of acceptable quality. Yet, it has not attempted to clearly determine what constitutes an adequate level of housing consumption within the local context. Another problem that arises is that the loan subsidy policy simply puts all middle-income households into one basket by assuming

that their needs are always the same and without much regard for differences in household size, economic and financial resources and housing aspirations.

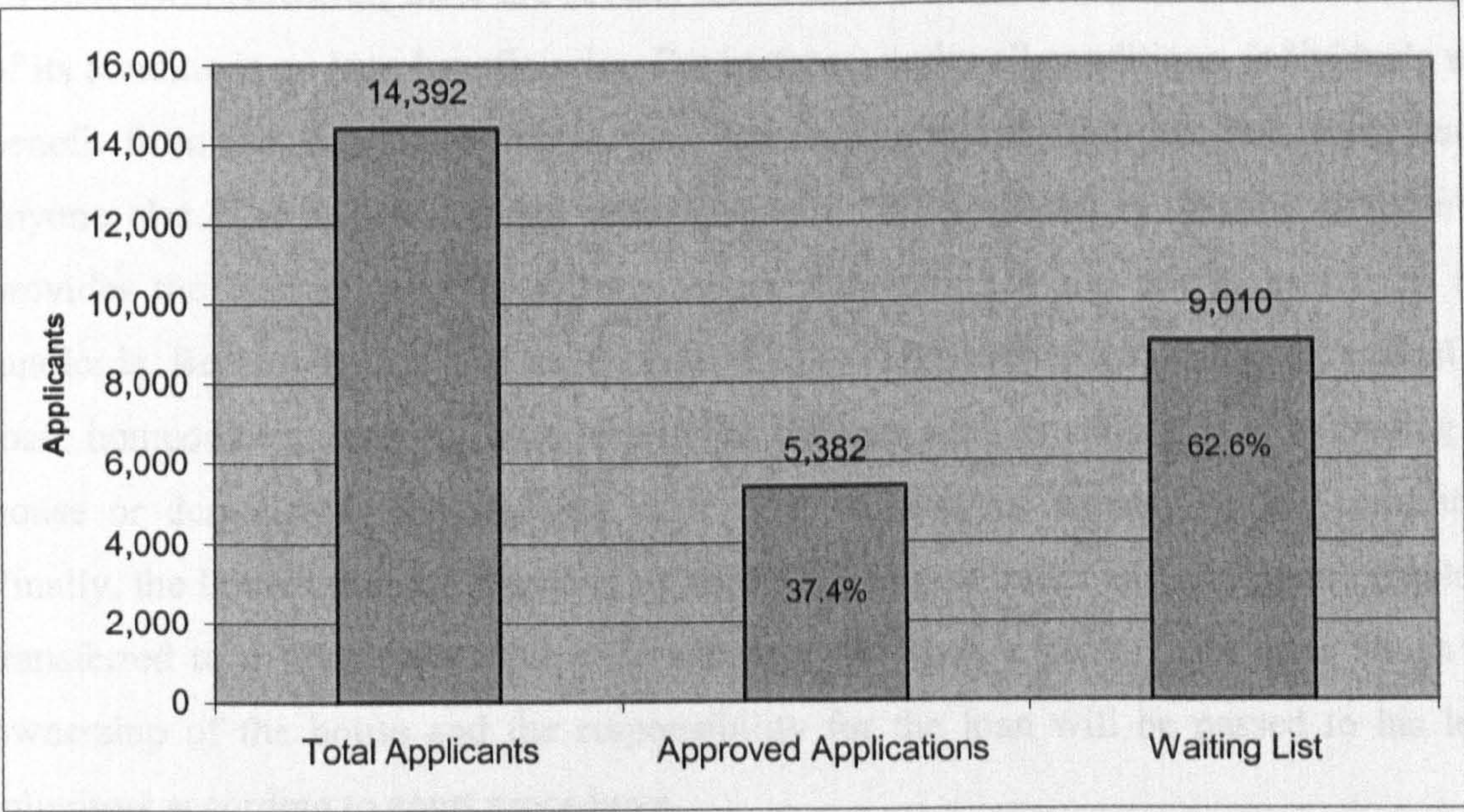
In September 2004, following a recommendation made by the PHFS Committee, the government issued an amendment to the law through which the upper limit of the housing construction loan was increased by 50 per cent to reach AED 750,000 (\$204,360). The reason behind the recent major increase according to the head of the programme committee is because of increasing construction cost (Al-Bayan, 15/9/2004). He also added that the aim was to reduce the financial burdens on those who receive the interest-free loans by reducing their needs for borrowing additional sums of cash from private commercial banks to supplement the government loan.

According to current practices, the PHFS committee provides housing loans of various types to those who have a monthly income of no less than AED 5,000 (\$1,362) and no more than AED 25,000 (\$6,812). A national who is applying for a house construction or purchase loan must prove through official documents that he or she does not already own a house to live in or owns one that is too small for the household or it is badly deteriorated and its maintenance is economically not feasible. The programme allows a maximum repayment period of 300 month (i.e. 25 years) in which all borrowers regardless of their exact income have to pay a fixed monthly installment of AED 1,666 (\$454). Additionally, once the loan application is approved, a one time service fee of AED 10,000 (\$2,724) must be paid.

Since its inception in 1993 to the end of the first quarter of 2005, the PHFS has received 14,392 applications from eligible individuals. It has managed to issue only 5,382 loans, which represents 37.4 per cent of total number of applicants. The remaining 9,010 (i.e. 62.6 per cent) of the applicants are on the waiting list which has been increasing at an accumulative rate of 8 percent per annum. Figure 4.9.



**Figure 4.9 The number of applications, approvals and waiting list in PHFS (1993 to Dec. 2005)**



*Source: The Private Housing Finance Scheme*

An overwhelming 96.5 per cent (i.e. 5,194) of loans approved to date have been granted for the purpose of building a new house, 1.8 per cent (i.e. 97 loans) were allocated to those who bought existing homes from the private market and finally a tiny 1.7 per cent (i.e. 91) of the loans went for those who chose to use the loan for house maintenance and extension. The total value of all approved loans has reached 2.5 billion Dirhams (\$680,000,000)<sup>64</sup>. Because almost all of those who have benefited from the loan are government employees, the PHFS faces no major risk with loan repayment as it has been allowed to deduct the instalments directly from their monthly wages. Until the end of 2004, it has managed to collect in total about 250 million Dirhams in monthly repayments of its loans.

The PHFS committee<sup>65</sup> which is responsible for evaluating and determining priority among applicants, has not adopted any clear and consistent criteria or point system that could be used to compare applications and decide on the most urgent or qualified ones. Moreover, the PHFS places no restrictions or guidelines on the size or the cost of the

<sup>64</sup> According to Al-Bayan 13/7/2005, because the PHFP has exceeded its allowed official budget, the government has decided not to allocate any more funds and had asked the PHFP to rely on its own resources from loan repayment.

<sup>65</sup> The PHFS has a committee of seven members named by the Ruler. Its main responsibilities are to set policies, supervise its management and determine its internal procedures.



housing units the beneficiaries intend to build as long as they pay the difference in cost on their own. However, there are several restrictions that the PHFS has introduced as part of its conditions on loan beneficiaries. For instance, under all conditions, individuals who benefit from the loan must live in their housing units and shall not rent them out to anyone else. The reason for that according to a PHFS official is that the government provides the loan to help the citizens house their families and not to turn them into landlords. Because houses that are financed by the PHFS are used as collateral against the loan, homeowners must not introduce major changes such as adding to or extending the house or demolishing any existing parts of it without the consent of the committee. Finally, the houses that are financed by the PHFS cannot under any condition be sold or transferred to a third party. The only exception is when a person dies after which the ownership of the house and the responsibility for the loan will be passed to his legal inheritors according to court procedures.

**Plate 4.10 An official meeting of the PHFS Committee**



*Source: Al-Bayan (28/6/2006)*

Because of fierce competition and fear that the government may suddenly suspend or abolish the loan subsidy, many applicants employ all their means and personal connections to have their applications for the loan approved faster than it may take under normal conditions. In fact, in year 2000, the first director of the PHFS was sacked from his position after being accused of taking bribes from several applicants wanting their application for the loan to be approved immediately. It is said that he was paid about AED 25,000 (\$6,812) from each applicant, but there was no official confirmation on the case that led to his firing (Al-Bayan, 8/10/2000).



#### 4.10.2.2 SHEIKH ZAYED'S HOUSING PROGRAMME (FEDERAL GOVERNMENT)

Until 1999 the UAE federal government did not play any role in the housing provision of nationals in Dubai Emirate. However, this situation was changed after the setting up of the Sheikh Zayed's Housing Programme (SZHP)<sup>66</sup> which is a nationwide programme responsible for providing nationals with financial means to help them to acquire adequate owner-occupied housing units. The programme provides two types of housing assistance;

- (1) an interest-free new house construction loan of AED 500,000 with repayment period of 25 years for nationals with monthly income of AED 10,000 or more.
- (2) a free housing grant of AED 500,000 to eligible applicants whose monthly earnings are below AED 10,000.

The SZHP assumes that individuals with monthly incomes below AED 10,000 are economically unable to repay a loan, therefore, they receive free housing grants. This threshold is perceived by a large segment of the national population as arbitrary and artificial as it does not take into account other factors such as number of children and financial responsibilities of each individual case. Just as in the case of PHFS, the SZHP has also adopted the AED 500,000 as its benchmark because of assumptions that such an amount is sufficient to provide an adequate housing unit for a national household. Moreover, the Programme board has been contemplating the chances for increasing the size of the loan and grant amount following the PHFS increase in Dubai Emirate (Al-Khaleej, 3/10/2004). Although its main objective is to help national households consume housing of adequate quantity and quality, the SZHP does not provide any precise definition of what it considers as adequate housing that it wants its beneficiaries to consume.

Individuals applying for housing assistance must supply documents that indicate their monthly wages and other sources of income. Moreover, every applicant is required to

---

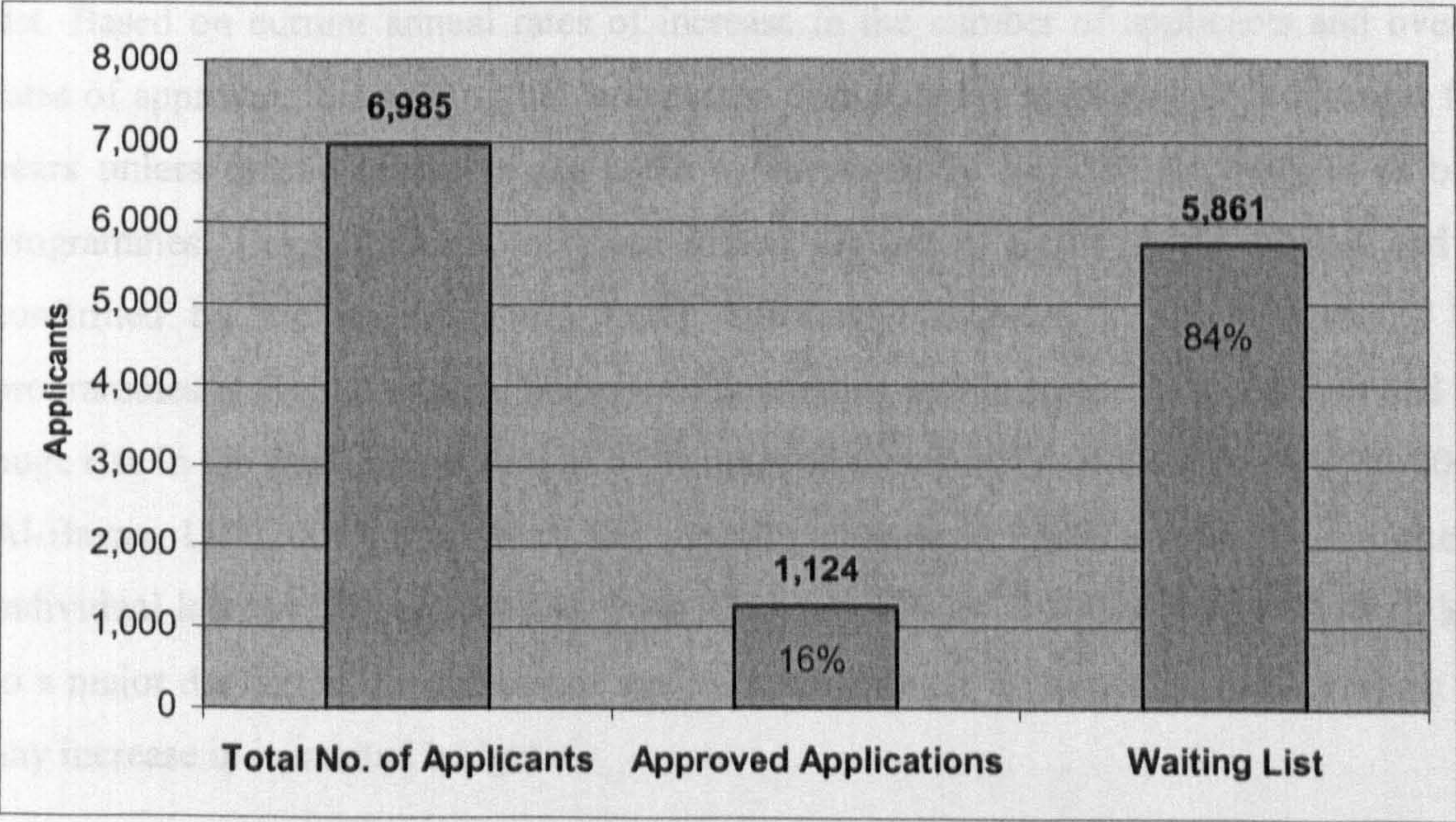
<sup>66</sup> The programme is named after the UAE's late President Sheikh Zayed and Ruler of Abu Dhabi Emirate who sadly passed away in November 2004.



provide official proof indicating that he or she and his or her spouse do not currently own an adequate housing unit or that their existing owned unit is too small for the household or it suffers from major defects and its repair is economically not viable.

As shown in figure 4.10, since its inception in 1999 to date, the SZHP has received 6,985 applications and managed only to approve 1,124 or 16 per cent. The accumulative size of its waiting list has reached 5,861 or 84 per cent of all accepted applications by the programme. 335 or 26.8 per cent of the approved applications were from those qualify for the free grants and 914 (i.e. 73.2 per cent) were those who qualified for the loan. The total value of grants and loans given out in Dubai Emirate alone has now reached 624 million dirhams. The SZHP board has recently announced that 40 per cent of the annual budget will be spent on loans and 60 per cent will be devoted to free grants (Al-Bayan, 16/2/2005).

**Figure 4.10 The number of applications, approved loans and waiting list in SZHP (1999- Dec. 2005)**



*Source: Sheikh Zayed’s Housing Programme*

Individuals who receive either the loan or the grant are free to build or purchase a housing unit of any size and cost they desire, as long as they manage to pay for the additional cost through their own means. The only restriction that the SZHP has imposed is the complete banning on the sale or renting of the housing unit that is built through



their finances. According to a senior programme official, so far, there have been about twenty cases where new homeowners have attempted to rent out their newly built homes, but they have been prevented from doing so by the SZHP management, as this goes against the agreement signed with the beneficiaries. Local newspapers often publish letters from disillusioned nationals who have been waiting for their turn for several years, in which they complain that some of those who received housing assistance from the government are actually renting their homes while they have to wait for the help they desperately need to house their households. Moreover, because applicants with monthly incomes below AED 10,000 can receive extremely generous free housing grants of AED 500,000 each, local newspapers have reported on a number of occasions that many nationals had given up jobs with higher wages for ones which pay less than AED 10,000 in the hope of qualifying for the free grant.

In summary, as presented in table 4.4, the total number of applicants for both PHFS and SZHP until the end of the first quarter of 2005 had reached 21,377. Only 6,506 or 30.4 per cent have so far been approved and another 14,871 or 69.6 per cent are on the waiting list. Based on current annual rates of increase in the number of applicants and overall rates of approval, this waiting list is expected even to grow much bigger in the next few years unless drastic measures are taken to substantially increase the budgets of both programmes. Despite recent increases in the oil prices in the world market and as confirmed by top government officials, substantial increase in the budgets of the programmes is highly unlikely because of continuing public sector budget deficit and the huge rise in the demand and cost of other areas of social services (Gulf News, 29/3/2005; Al-Bayan, 16/8/2004). Moreover, The recently announced PHFS increase in the size of individual loan by 50 per cent (i.e. from AED 500,000 to 750,000) is very likely to lead to a major decline in the number of application approvals as there is no real prospect for any increase in its annual budget.

**Table 4.4 Summary of PHFS and SZHP’s total applicants, approvals and waiting list until December 2005**

Program	No. of applicants	No. of approval	No. of waiting Applicants
PHFS	14,392	5,382	9,010
SZHP	6,985	1,124	5,861
Total	21,377	6,506 (30.4%)	14,871 (69.6%)

*Sources: The Private Housing Finance Scheme and Sheikh Zayed’s Housing Programme*

**4.10.3 THE PRIVATE HOUSING DESIGN CONSULTANTS**

Throughout the last thirty five years, the private consulting offices (*isteshari*) have been gaining increasing importance in the physical development process. The responsibilities of the consultant in the housing delivery basically include three major tasks.

- (1) **preparation of project design (*tasmeem*) and drawings:** those include architectural design (floor plans, sections and elevations), structural design, utility drawings including, electrical system, water distribution, telephone connections and drainage system.
- (2) **preparation of tender document and specifications (*muasafat*):** the consultants in conjunction with project owners develop ‘general and specific conditions’, which include types and qualities of materials, such as drainage pipes, electric wirings, electric meter and sockets, water heating machines, air-conditioners, flooring materials, sanitary fittings, windows, doors, paints, lighting fittings etc.
- (3) **supervision (*ishraf*):** the consultant acts as a representative of the client and is charged with duties of making sure that the contractor is in full compliance with all aspects of the project contract signed with the owner.

There are currently about 247 private architectural consultancy firms officially registered in Dubai Emirate. According to Dubai Emirate Local Order No. 89 for year 1994- Article 18, consulting offices are classified into three main categories. The *first category* is the



larger size consulting firms who would at least employ 3 architects and 3 civil engineers who have 10 or more years of experience in the field. Firms included in this category are allowed to work on construction projects of all sizes and types. Typically, they only work on multi-million Dirham high-rise building projects and larger size commercial and industrial buildings, where they can guarantee higher financial returns. Although they are allowed to do so, they do not accept small scale and individual private dwelling unit projects. Most firms in this category would normally charge their clients between 5 to 7 per cent of the total project cost. In addition to the locally established consulting firms, there are about 20 or so internationally known consulting firms from countries such as, the United Kingdom, United States, Canada and Italy. International consulting firms work on major and more complex high budget project that local firms may not be able to handle.

*Second category*, includes medium size offices who are only allowed to work on building projects of up to 12 floors in height. Each firm must hire at least 2 architects and 2 civil engineers with at least seven years of professional experience in their respective fields. Offices in this category are mostly involved in medium size projects and less frequently accept individual private home projects.

*Third category*, includes smaller firms who are only allowed to work on projects that are no more than 4 floors in height. Offices in this category are only required to hire at least 1 architect and 1 civil engineer who have at least 5 years of experience in their respective fields. Currently, there are 133 firms within this category. This constitutes nearly 54 per cent of firms in all categories. Most of their projects include individual private homes and some low-rise multi-storey buildings. Because of widespread competition, they normally charge their clients between 1.5 to 4 percent of the total construction value of each project.



**Plate 4.11 One of the 133 smaller private consulting offices operating in Dubai**



*Source: Author- fieldwork 2003*

Although, all consultant firms are licensed under the names of national architects and engineers,<sup>67</sup> almost all of them are managed and run by expatriate architects and engineers from Egypt, Jordan, Syria, Sudan, India, Pakistan, the Philippines and other countries. This diversity in the cultural and technical backgrounds of the architects practicing in the Dubai market had helped in importing foreign and alien design concepts into an area that for many centuries had homogenous styles of buildings.

It is mandatory for all practicing architects and engineers to have recognised university degrees in their respective fields, but they are not subjected to any professional or licensing examinations. However, some civil engineers might be called for personal interview before they are allowed to practice. Consulting offices are also required by local regulations to secure permanent and adequate working space. Architects working in consulting firms in Dubai are paid either on fixed lump sum monthly salary or receive percentage commissions on the projects they bring and work on.

<sup>67</sup> Business licensing law in Dubai Emirate allows only qualified national architects and engineers with university education in those fields to obtain consulting office permits in order to allow them to practice in the Emirate. A similar law exists for other professions such as, medicine, law and accountancy.



#### 4.10.4 DUBAI MUNICIPALITY

The Dubai Municipality (DM) is the Emirate's oldest and most comprehensive government institution. It is responsible for a wide range of activities related to urban planning and development, building control and public projects. The DM involvement in the housing process is particularly important in three specific areas (1) the development and enforcement of planning regulations (2) development of building codes (3) building control.

With respect to planning regulations, the Municipality sets standards and legal parameters for issues related to minimum plot size, maximum allowable plot coverage, development density and setback requirements. Current regulations for single-household residential areas only allow detached housing units with at least 10 feet setbacks from all sides. A single housing unit is allowed to be constructed on one plot, however, an additional accessory building or service block (kitchen, dining-room, servant's room, etc..) may be permitted. The reason behind limiting the number of independent housing units to one on each plot despite the large size is to prevent owners from building other units that could be possibly used for rental investment purposes.

The building code is another important input in the housing development process. In year 2000, the DM adopted a new building code. The new code includes conditions on both architectural and structural requirements of buildings of different types. For instance the code sets mandatory standards for the minimum size of all sort of rooms (i.e. habitable rooms, kitchen, bathroom and toilet) in residential units. As discussion in chapter 5 will show, the average size of various types of habitable and non-habitable rooms of the study households are larger by more than 3 times than the minimum size standard specified in the building code. Furthermore, existing DM codes and regulations do not include any guidelines on appropriate standards for housing occupancy (i.e. number of person per room). The Municipality considers the introduction of such guidelines as interference in people's freedom, despite the fact that it could be only advisory.

#### 4.10.5 THE BUILDING CONTRACTORS

Building contractors (*muqawleen*) play important roles in both the economic growth and development and the housing provision system. There are currently 1,119 private building construction companies operating in Dubai Emirate. They contribute to 7.5 per cent of the Emirate's GDP and employ some 111,700 which adds up to 15.2 per cent of the total employment in the Emirate. According to local regulations, building contractors are generally classified into three categories.

*First category*, includes contracting firms that are allowed to work on all types and sizes of building construction projects. Only 76 firms or 5.2 per cent of all building construction firms are included in this category. The larger size contractors work on major projects, such as multi-storey tower buildings, major industrial, institutional and commercial development projects. Firms within this category often make huge investment in machinery and labour, therefore, they would only be involved in high budget and more lucrative projects. According to local regulations, every firm within this category must hire at least one full-time qualified civil engineer with at least 10 years of experience in the construction method he or she is involved in. Most firms, however, hire more than three engineers owing to high workload especially during peak construction times.

*Second category*, includes all medium size contractors who are only allowed and capable of handling projects that are not more than 7 floor in height. There are 232 or 20.7 per cent of firms currently registered under this category. They normally work on medium size building projects and to a lesser extent in the construction of individual private dwelling units. Each firm in this group must at least employ 1 civil engineer with at least 7 years of experience in the construction industry.

*Third category*, includes the small size contractors whose projects are restricted to buildings of only up to two floors i.e. ground plus one. This is by far the biggest category in terms of number of firms. There are 811 licensed small size contractors which adds up to around 72.5 per cent of the total number of firms practicing in the Emirate. Most individual private dwelling units are built by smaller size contractors within this group.



Firms licensed under this category are required to hire at least one qualified civil engineer with the minimum of 3 years of work experience in similar construction methods to be able to supervise work on site.

Building contractors have access to both locally produced<sup>68</sup> and imported building materials. Open market policy and encouragement of domestic investment in the construction industry have played a noticeable role in both securing uninterrupted supply of building materials and stabilizing the prices in line with acceptable inflation rates. However, in 2004, the UAE construction market witnessed its biggest ever hike in the price of building materials. The price of cement had doubled and steel price rose by nearly 80 percent (Al-Ittihad, 3/5/2004). Such an unusually sharp and sudden increase in the cost of building materials, caused many ongoing projects to be suspended and several dozens of both small and medium size contractors to declare bankruptcy. It was later announced that increasing local and international demand, particularly from the Chinese market and local monopolistic activities among suppliers were the main causes of this unprecedented hike in the price of building materials. Two months later, the Dubai government decided to interfere and bring this issue to an end. As a result, collection of custom tax on imported cement and steel was temporarily suspended to encourage further import from other countries. Soon after that, the prices fell back to their normal levels (Al-Bayan, 3/8/2004).

The introduction of new and complex building construction methods and the acute shortage in the number and skills of the national labour-force have led to the complete reliance on expatriate manpower. Low-paid workers from India, Pakistan, Bangladesh and to a lesser extent Egypt dominate employment in the construction sector<sup>69</sup>. Despite its full reliance on foreign labour-force, the construction sector has never experienced any real manpower shortage. This is due to relaxed immigration laws and the relatively higher wages compared to their respective home countries. Every now and then, some labourers go on strike to express their disapproval about either delayed payment of monthly

---

<sup>68</sup> Since early 1970s, several construction material production plants (i.e. cement, ceramics, paint, electrical cables, bricks, etc.) have been established by the private sector benefiting from tax exemption and soft investment loans subsidized by the federal and some of the local governments. However, steel used for reinforced concrete is still entirely imported from abroad.

<sup>69</sup> The monthly salary of a typical construction laborer in the UAE ranges between AED 400 to 800 (\$110 to 218) (Al-Kaabi and Hadipriono, 2003: 199).



salaries, poor housing conditions or lack of adequate safety requirements on major construction sites (Gulf News, 28/3/2005 ). Because of increasing violations of labourer's contractual rights, the government has set up a permanent committee to oversee compliance of construction firms with labor laws and regulations (Al-Khaleej, 8/3/2005).

## 4.11 SUMMARY

Before the discovery and exploitation of oil in the 1960s, the UAE was a poor, backward and scarcely populated region that lacked most basic social and community services. However, with oil becoming a major source of national export, the country has managed to accumulate surplus income. Major increase in public revenues has enabled the UAE federal and the subsequent local government of Dubai Emirate to establish a comprehensive and highly generous tax-free welfare system. The discovery of oil has also helped in forming a new middle-class in the country which now makes the largest proportion of the national population and is composed primarily of those employed by public sector institutions.

Besides education, health, potable water and electricity, housing is one of the main social services that has received considerable subsidies from the government at both federal and local levels. Throughout the past three decades, different forms of state provided subsidies have played significant roles in vastly improving housing conditions of both low and middle-income national households in Dubai Emirate.

In 1993, the Dubai local government initiated the PHFS which provides an interest-free soft housing loans of AED 500,000 each with repayment period of 25 years, aimed at households from the middle-income segment of the national population. Additionally, the government also provides free of charge serviced residential plots to all married male citizens or once reaching twenty five years of age for the purpose of building a dwelling for the household. In 1999, the UAE federal government also began providing similar interest-free housing loans in Dubai and the rest of the emirates. The aim of such policies as declared by government mandate is to provide nationals with the means of acquiring



and consuming adequate housing. However, no clear and measurable definition of adequate housing has ever been proposed.

As a result of implementing those generous housing subsidies, households benefiting from the land and interest-free soft loan grants have been enabled to consume housing at rates that are much greater than past trends and international standards and benchmarks. Nevertheless, the number of those been granted interest-free loans from the total number of eligible loan applicants has remained relatively small and waiting time has increased owing to limited budgets provided by the government and the slow pace of loan recovery period because of very small size of loan repayment installments. Analysis of growth in number of applicants has revealed that if current circumstances continue, the number of interest-free loan applicants will vastly increase and create a huge backlog which may be almost impossible to clear. Sustainably and equitably managing current and anticipated future problems with regard to the methods of middle-income housing provision particularly government subsidies may require major policy intervention and reform. New policy measures which can help in rationalizing rates of housing consumption are needed to address this issue.

**Chapter 5:**  
**SOCIO-ECONOMIC CHARACTERISTICS,**  
**HOUSING CONDITIONS OF THE STUDY**  
**POPULATION AND ANALYSIS OF DWELLING**  
**UNITS' SPACES**



## 5.1 INTRODUCTION

This Chapter which serves as an introductory chapter to the fieldwork analysis has two main objectives. First, it intends to present the socioeconomic characteristics of the study population, i.e., both *owner-occupants* and *owners-to-be* population. Analysis will draw comparison among the sample population by income strata, age structure, marital status, household types and size and gender.

Second, the housing conditions of both population groups will be examined by assessing important issues. Analysis will include, assessment of previous housing tenure, the cost of construction of current housing units, sources of housing construction finance, size of dwelling units and current rates of housing space consumption by income strata. Finally, the chapter will include discussion and analysis of number and size of various domestic housing space (i.e. rooms) of the study population.

## 5.2 SOCIO-ECONOMIC CHARACTERISTICS OF STUDY POPULATION

### 5.2.1 POPULATION DISTRIBUTION BY INCOME STRATA

Income is one of the most important criteria for the granting of housing loan subsidy. As discussion in chapter two has shown, income also has quite often been found to strongly influence housing consumption rates.

In the context of this study, income is defined as the total and regular financial earnings from both wages and non-wages sources that were available for household disposal. Therefore, informants were asked to provide information on all sources of regular financial earnings including salaries and other non-salary sources such as earnings from commercial and business licenses, and leased properties which were thought to be common among middle-income citizens in the UAE. Furthermore, for the purpose of securing higher accuracy in understanding issues and trends related to housing consumption and as mentioned in earlier chapters, this study segments the middle-class study population into three sub-groups, (1) low-middle (i.e., households

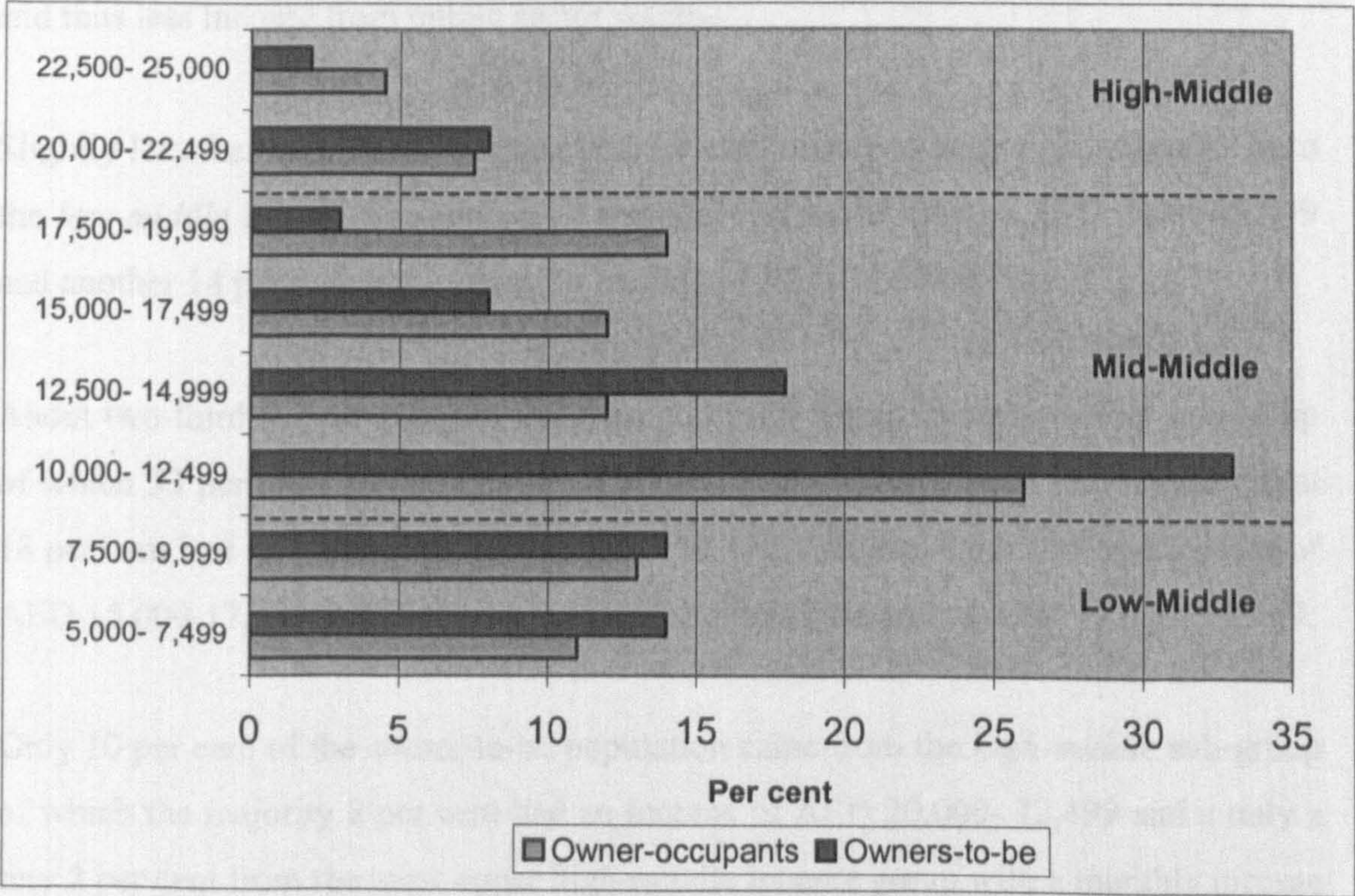


with monthly income of AED 5,000 to 9,999), (2) mid-middle (i.e., households with monthly income of AED 10,000 to 19,999) and (3) high-middle (i.e., households with monthly income of AED 20,000- 25,000). It is important to highlight that difference in income level between the three study groups can be in some cases quite substantial as for instance the high-middle households have an income level that is nearly five times of that of the lowest income households.

OWNER-OCCUPANT

As shown in figure 5.1, population in *low-middle* sub-group constitutes almost one quarter (24 per cent) of the total study population. 11 per cent were from the lowest segment of low-middle income with monthly income between AED 5,000- 7,499 (\$1,362-2,043). The upper segment of low-middle income population with monthly income of AED 7,500-9,999 (\$2,044- 2,725) constituted 13 per cent of the total population.

Figure 5.1 Income subgroup distribution for owner-occupants and owners-to-be



Source: fieldwork, 2003-2004



*Mid-middle income* is by far the largest income sub-group with more than two third (64 per cent) of the total study population, of which 26 per cent are those with monthly income of AED 10,000- 12,499 (\$2,725- 3,406). 12 per cent had income of AED 12,500- 14,999 (\$3,406- 4,087) and another 12 per cent with income of AED 15,000- 17,499 (\$4,088- 4,768). Finally, the upper segment of mid-middle income constitutes 14 per cent, with monthly income of AED 17,500- 19,999 (\$4,769- 5,449).

*High-middle income* sub-group counts only for 12 per cent of the study population. 7.5 per cent of this sub-group had a monthly income of AED 20,000- 22,499 (\$5,550- 6,130). Finally, only 4.5 per cent of the population came from the most upper middle-income with a monthly income of AED 22,500- 25,000 (\$6,131- 6,812).

## OWNER-TO-BE POPULATION

As shown in figure 5.1, income distribution among the owners-to be study population is slightly different. The low-middle income sub-group is bigger by some 4 percent from those in the owner occupant population. This may be caused by the lower age and thus less income from public sector wages.

Slightly less than a third (28 per cent) of the total owner-to be population came from the *low-middle income* sub-group. 14 per cent had an income of AED 5,000- 7,449 and another 14 per cent had a monthly earning of AED 7,500- 9,999.

About two-third (62 per cent) of the population fell within the mid-middle sub-group of which 33 per cent had an income of AED 10,000- 12,499. Data also revealed that 18 per cent had an income of AED 12,500- 14,499. Another 8 per cent had income of AED 15,000-17,499 and finally, a tiny 3 per cent had income of AED 17,500- 19,999.

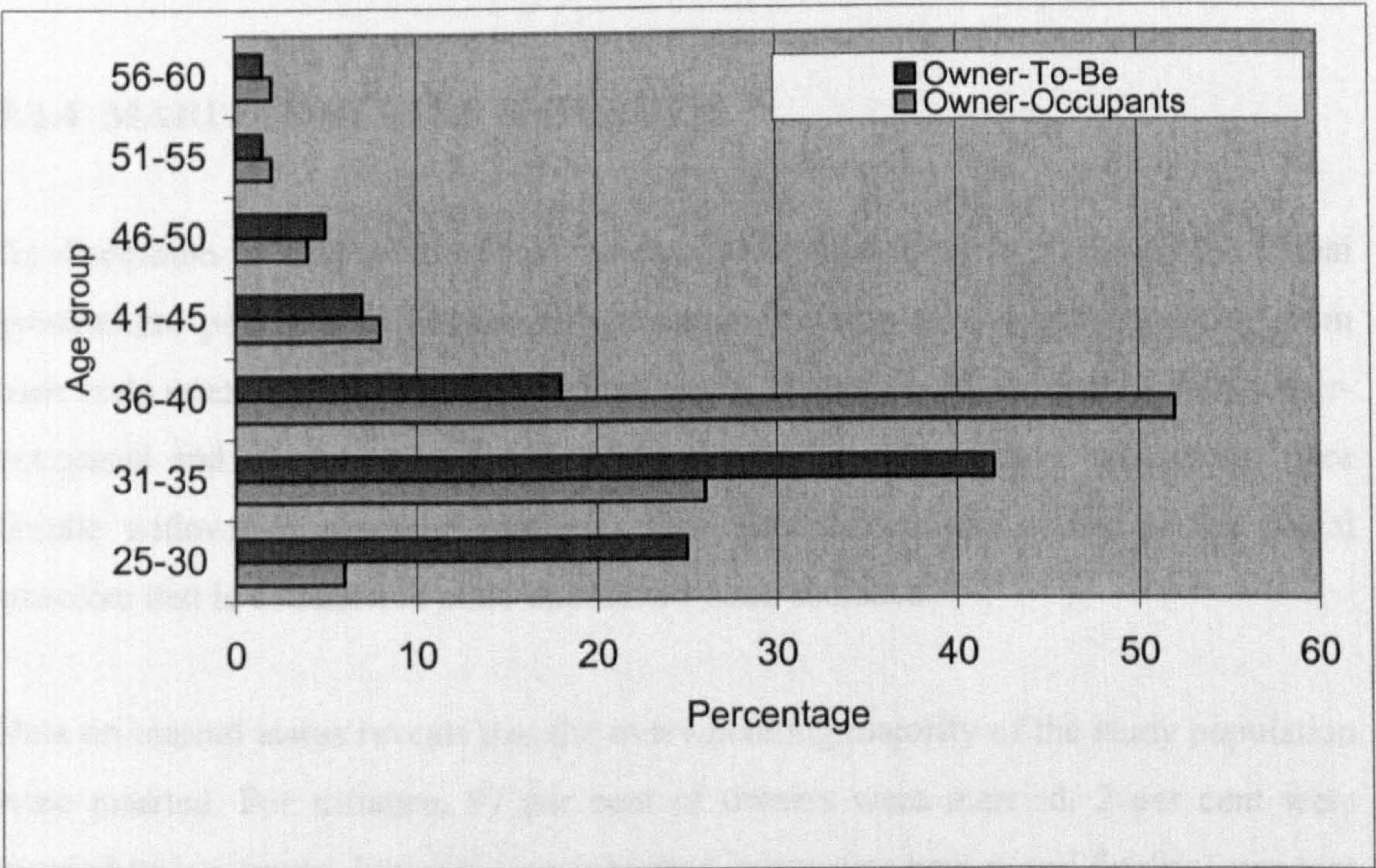
Only 10 per cent of the owner-to-be population came from the *high-middle* sub-group of which the majority 8 per cent had an income of AED 20,000- 22,499 and a only a tiny 2 per cent from the most upper high-middle income group with a monthly income of 22,500- 25,000.



5.2.2 AGE

Analysis of data on the age structure of the two population groups reveals a noticeable difference. As presented in figure 5.2, more than half (52 per cent) of the owner-occupants are from the age group between 36-40 years. This group represents those heads of households from the earlier batches who benefited from the housing loans. A little more than a quarter (26 per cent) of the owner-occupants are younger and aged between 31-35. This group represents those who have benefited from the loans more recently. The remaining 22 per cent of the population within the owners, are scattered within other age groups.

Figure 5.2 Age structure for owner-occupants and owners-to-be



Source: fieldwork, 2003-2004

The situation is somewhat different within the owner-to-be population. 42 per cent are within age group 31-35. Another one quarter (25 per cent) are from the younger age group of 26-30. About 18 per cent are aged between 36 and 40 years. Analysis of age structure indicates that nearly three quarters (74 per cent) of loan applicants have been granted the interest-free loan after they have passed the age of 31. This indicates two general points, first, that generally, loan providing agencies give priority to applicants with larger households rather than smaller ones. Second, the loan waiting list has



grown bigger and this has resulted in increasing the time spent on waiting list by the applicants.

### **5.2.3 EMPLOYMENT**

The majority of the study population of both groups are employed in the public sector. 91 per cent of the owners and 93 per cent of owners-to-be work in either local or federal government institutions. Only 4 per cent of owners and 5 per cent of owners-to-be are employed by the private sector. 3 per cent of the owners and 1 per cent of the owners-to-be are self-employed or run their own small-scale businesses and, finally, 2 per cent of the owners and 1 per cent of the owners-to-be are retired ex-government employees.

### **5.2.4 MARITAL STATUS & GENDER**

As discussion in chapter three has indicated, because of cultural reasons the Dubai government policy does not encourage female citizens to live independently from their male relatives except in very limited cases. Therefore, 99 per cent of both owner-occupants and owners-to-be were male and only one per cent of each group were female widows or divorced mothers. This also reflects the nature of the social structure that is common in male-dominated Arab societies.

Data on marital status reveals that the overwhelming majority of the study population were married. For instance, 97 per cent of owners were married, 2 per cent were married to two wives, but wives were housed in separate homes and finally 1 per cent was widowed and divorced females. For the owner-to-be population the situation was slightly different. 93 per cent were married and one per cent was widowed. However, despite the fact that both the PHFS and SZHP have declared that they give housing loan priority to married applicants and especially those with larger households, 6 per cent of the owner-to-be population were single. This is a strong indication that individuals who have strong ties and are well connected to members of loan committees are often given priority over others even if they are still unmarried.



### 5.2.5 EDUCATIONAL ATTAINMENT

The overwhelming majority of middle-class population is employed by the public sector and, as discussed in chapter three, the amount of wages paid by the government are based on several factors of which educational attainment is the most important one. Therefore, data on educational attainment can help in verifying income data provided by the respondents.

Among the owner-occupants, nearly two-third (58 per cent) of the population had university degrees. More than one third (34 per cent) had high-school diplomas, 6 per cent had intermediate level and finally 2 per cent were classified as those who could read and write.

A more or less similar situation was found with regard to the owners-to-be population. Slightly more than half (54 per cent) of the population had university level degrees. Another 39 per cent had high-school diplomas and finally 7 per cent with intermediate education level.

### 5.2.6 HOUSEHOLD SIZE AND TYPE

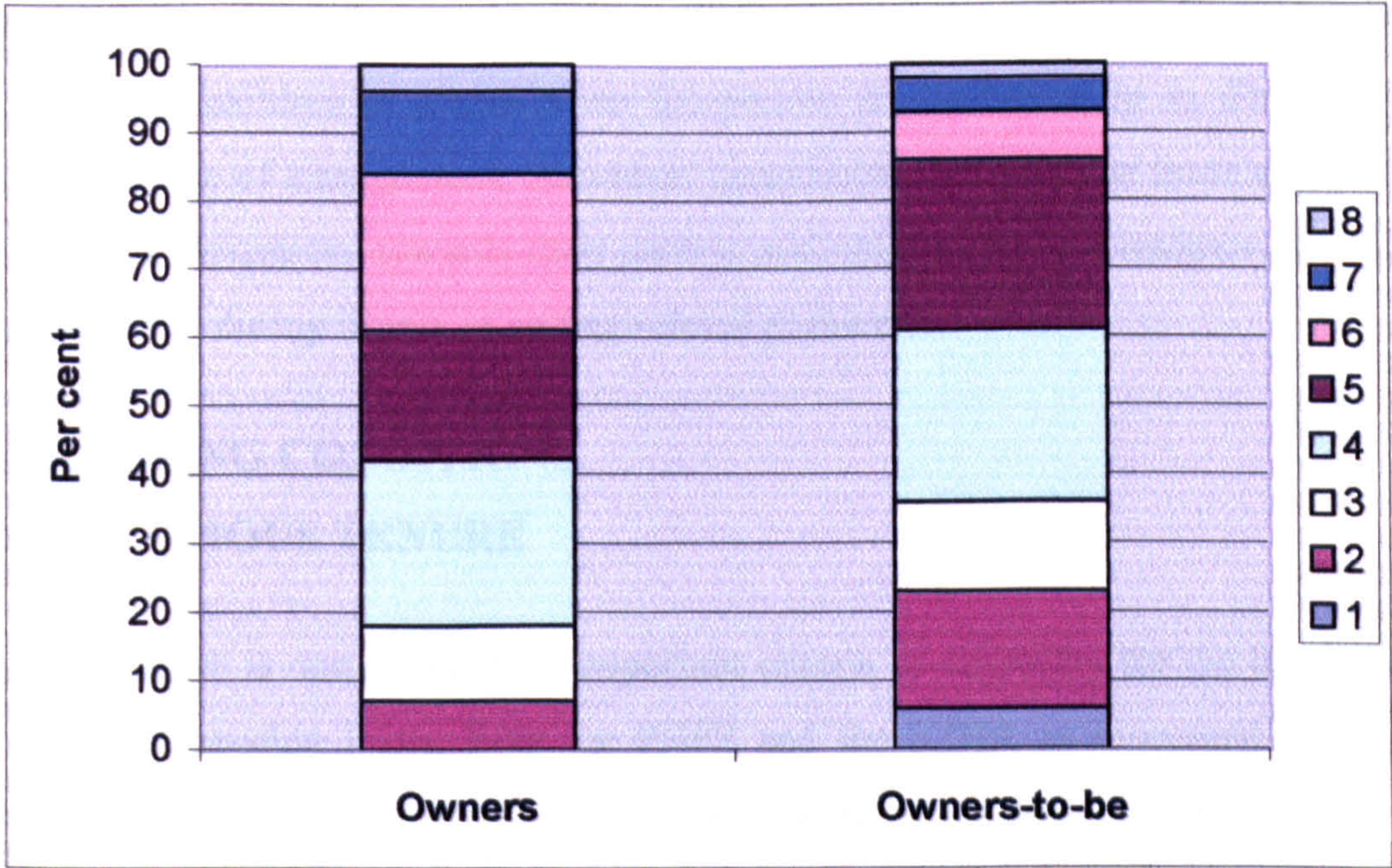
As discussed in chapter three, the UAE's family structure is undergoing major changes within the last few decades. The extended-family pattern of domestic living arrangement, that dominated the region, is now being replaced by the nuclear-family that is composed of the parents and their children. This is also applicable to the study population within the middle-class nationals. Only 10 per cent of the owner-occupant population and 8 per cent of the owner-to-be population had other family members (i.e. other than parents and children) who were living or would be living within the same housing unit. In all of the cases this was one individual relative, for instance, an older age mother who lost her husband and unmarried older sister.

Figure 5.3 presents the distribution of household size within the two study groups. The data on household size reveals a significant difference in household size between the two groups. The owners-occupant group is in general larger in terms of household size. Its average household is 4.9 person per household compared to 3.7 for the



owner-to-be group. However, average sizes of households in both groups are expected to increase with time and will reach the normal average size of national households at 6.2 person per households as the majority of them are still relatively young and have not passed child bearing age.

**Figure 5.3. Household size for owner-occupants and owners-to-be**



*Source: fieldwork, 2003-2004*

About two third (66 per cent) of households within the owner-occupant group were composed of 4, 5 and 6 members while 18 per cent were made of only 3 and 2 members i.e. those couples with one child and childless couples. Another 16 per cent of the households were composed of 7 and 8 members, those representing the older age population.

For the owner-to-be population group the picture is completely different. Nearly one quarter (23 per cent) of the population was made of 1 and 2 member households of which 6 per cent were single persons and 17 per cent were childless married couples. Exactly half of the population (50 per cent) were those households with 4 and 5 members. The remaining 14 per cent were households with sizes of 6,7 and 8 members.

The *quasi-extended family* is another common form of household living arrangement in Dubai Emirate. In this type of arrangement, two or more households (i.e. for



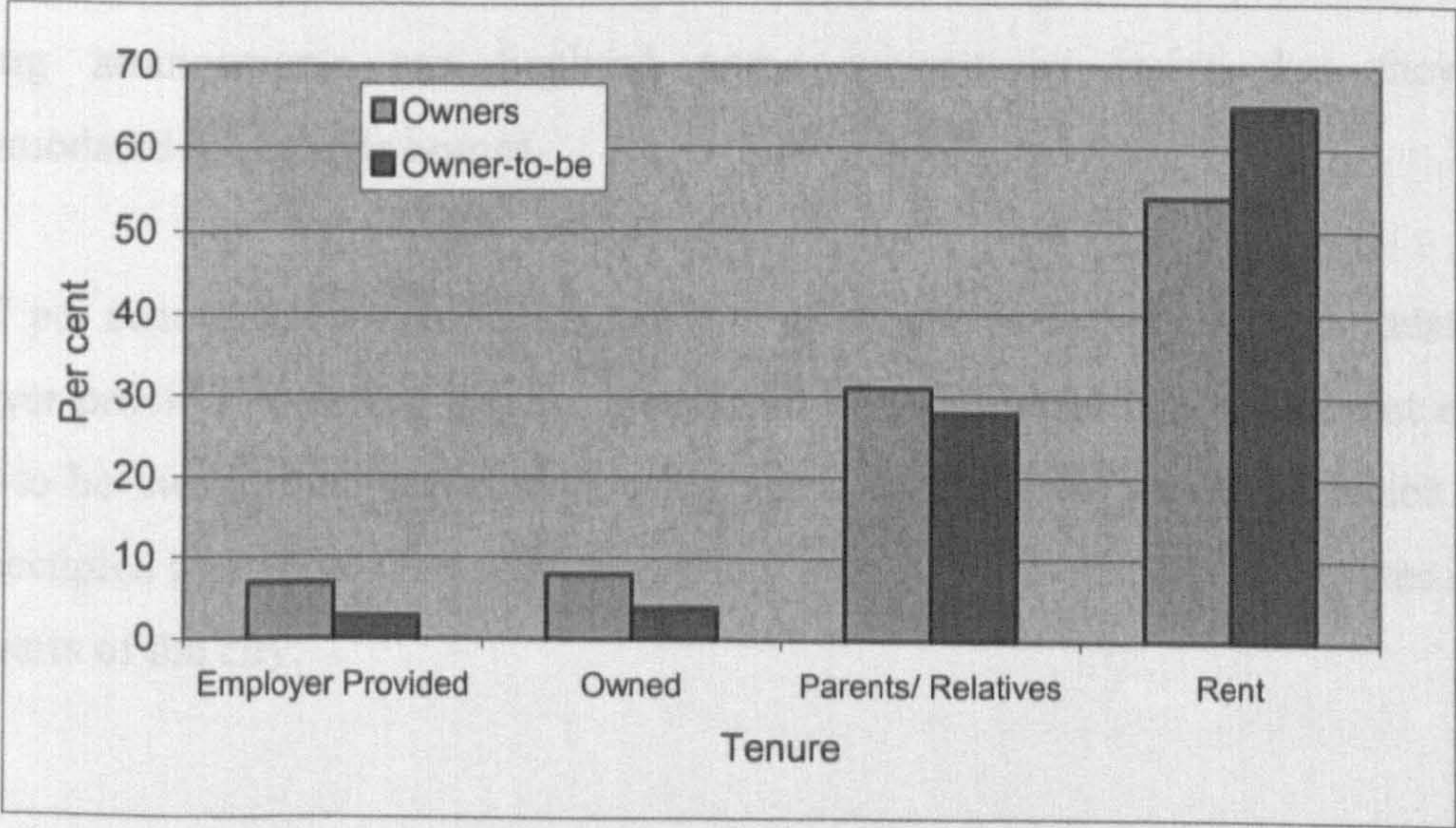
instance, a father and his sons) would choose residential plots that are adjacent to each other and then build their separate homes and become neighbours. It has now become common to find three to four adjacent plots that are allocated to close relatives of either the same or different generations. Such an arrangement satisfies both households' desire for privacy and independence and also provides the social benefits of the extended family. Grandmothers, for instance, can help in looking after grandchildren who stay at home while mothers may be at work and grandfathers help in taking the children to school when the parents are unable to do so. Furthermore, under this type of arrangement, individual households members can more easily fulfil their social obligations towards their parents and children by, for instance, providing social support during illness or ageing-related problems.

5.3 HOUSING CONDITIONS

5.3.1 PREVIOUS TENURE

Housing tenure is one of the most important criteria of eligibility for the interest-free government housing loans. Both the PHFS and the SZHP, as discussed in chapter three, require that each applicant must prove that he or she does not own an adequate housing unit which could be used to accommodate the household. See subsections 4.10.2.1 and 4.10.2.2.

Figure 5.4 Type of previous tenure of owners and current tenure of owners-to-be



Source: Fieldwork, 2003-2004



Figure 5.4 includes data on the previous housing tenure of the owners and the owner-to-be groups. The data show that the greater proportions of both groups were renting their accommodation before they became owners. 54 per cent of the owner households were renting their accommodation and 65 per cent of the owner-to-be households had to rent their housing from the market. Despite their strong preferences for detached single-household dwelling units, most middle-class nationals could only afford renting small two and three bedroom flats in areas of mostly expatriate population. Just as in the case of the expatriates, and because of high rental cost, some low and mid-middle income households have moved to the neighbouring emirates where they can find cheaper flats. Virtually all renting national households view their tenure (i.e. renting) condition as temporary even if it goes on ten or more years. In fact, most of them find it highly unacceptable to live in rented accommodation in their own country.

The second most common form of accommodation arrangement was those who live with their parents or [father]-in-laws. 31 per cent of the owners have declared that they were either living with their parents or their [father]-in-law. An almost equal proportion (28 per cent) of the owners-to-be lived in similar arrangements. In most cases one or, if available, two rooms in the parents' homes are allocated to their married sons until they manage to build their own dwellings. There are many stories about family problems that have risen as a result of disagreements and conflicts between the wives and their mothers-in-law. To avoid such potential problems, before wedding arrangements are finalised some wives-to-be insist that they are accommodated in separate homes.

Only 7 per cent of the owners and 3 per cent of owners-to-be were accommodated in employer-provided housing. Lastly, 8 per cent of the owners and 4 per cent of the owner-to-be owned their previous housing units. All of those dwellings which were once occupied by national households are now rented to low-income expatriates in the older parts of the city.



### 5.3.2 COST OF HOUSING CONSTRUCTION

Construction cost refers to the overall cost of housing unit construction. It is normally measured by the cost of a square metre of median-priced dwelling unit. The cost components include the cost of labour, building materials, on-site utilities, consultancy fees and contractor profits. The cost of residential land is sometimes included in the overall cost of construction, however, since in this case land is freely granted to beneficiaries, there is no point of adding it to the housing price borne by the homeowners.

Officially recognised historical data on the cost of construction for various types of buildings do not exist in the Dubai Emirate. This is because of lack of official records and paucity of research efforts related to construction economics and housing policy. A similar problem exists throughout the rest of UAE (Al-Mansoori, 1997). Both PHFS and SZHP were approached and asked for data on construction cost since they have been involved in financing private housing construction over the past several years. Both organizations have replied that they did not capture and disseminate such data. Lack of consideration for such basic and vital housing policy data reaffirms the fact that the two organizations do not regard housing policy assessment as an important part of their responsibilities. A top official in the SZHP had made this point clear by stating that,

*We (i.e. the SZHP) are a financing institution and have got nothing to do with setting housing policy. Our responsibility is to process loan and grant applications in line with the official regulations and allocated annual budgets.*

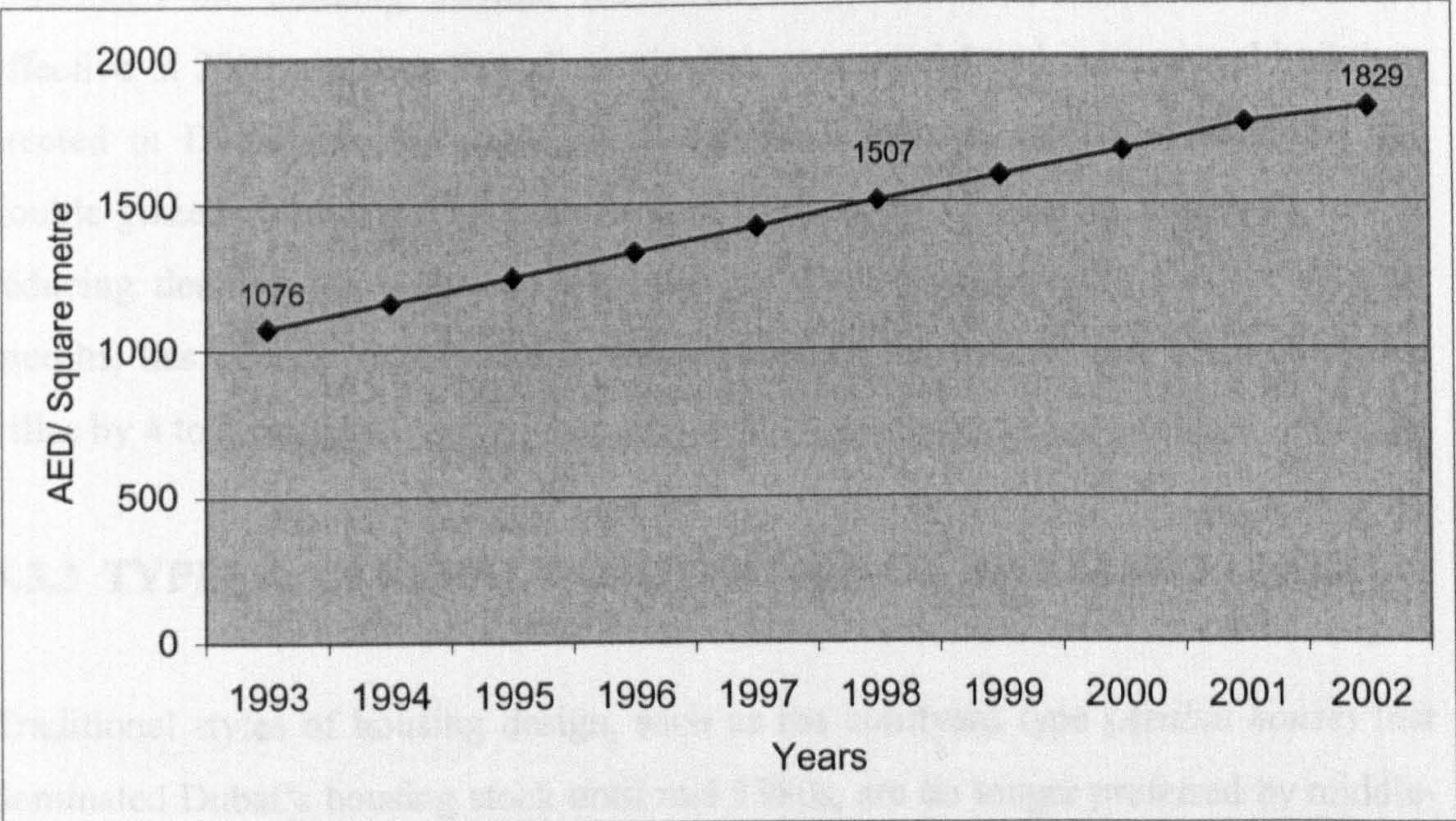
As a result, the researcher had to rely on non-official sources of data. In this case, data on construction cost came from the answers of the study sample surveys which had to be verified and adjusted to the figures that were suggested by several private consultancy offices and building contractors who had been involved in the construction of nationals' housing in Dubai Emirate.

Just like other products and services in the market, the cost of construction is often subjected to changes in price as a result of factors related to demand and supply and to



some extent to changes in the building laws and regulations. Figure 5.5 presents a ten year (i.e. from 1993 to 2002) data on the per square metre cost of construction of middle-class nationals' housing in Dubai Emirate. The statistics reveal a steady annual growth trend in the construction cost of 6.9 per cent<sup>70</sup>.

**Figure 5.5 The per square metre construction cost of middle-class single-household dwelling unit in Dubai Emirate- 1993-2002**



*Source: based on data collected from a sample survey and verified by local contractors and consultants.*

In 1993 the cost of a median square metre for middle-class villa in Dubai Emirate was AED 1,076 (\$293). Since then, the cost of construction has continued to grow at a regular pace and by half way through i.e. by 1998 most home-owners were expected to pay around AED 1,507 (\$411). This represents an increase of AED 431 (\$117) per square metre or a 40 per cent increase. By year 2002 the cost had reached AED 1,829 (\$498)

Most of the increase in the cost of private housing construction has come from inflation in the price of building materials in the local market. The cost of labour, however, did not witness any substantial increase throughout this period and thus, one could conclude that it had not played a major role in the overall increase in the cost of

<sup>70</sup> Between year 2000 and 2004, the average annual inflation rates that were recorded by UAE's Ministry of Economics and planning for basic food stuff was 4 per cent and basic medications 5.7 per cent (Al-Khaleej, 20/6/2005).



construction. Some of my informants among the private consultants and building contractors have also indicated that increase in household choices of standards for materials used in home finishing and fittings is thought to have contributed in the steady upward growth of per metre cost of private housing construction in Dubai.

In an effort to make the use of energy more efficient, the Dubai Municipality in conjunction with the Dubai Electricity and Water Authority (DEWA) have recently introduced the building thermal insulation code. The new code, which became effective in 2003, requires that all residential, commercial and institutional buildings erected in Dubai Emirate must use standardised thermal insulation materials and double-glazed windows. This code, which is expected to play an important role in reducing demand for electricity used for air conditioning during the hot summer months, has already contributed in the increase of the overall cost of middle-class villas by 4 to 5 per cent.

### 5.3.3 TYPES & GENERAL COMPOSITION OF DWELLING UNITS

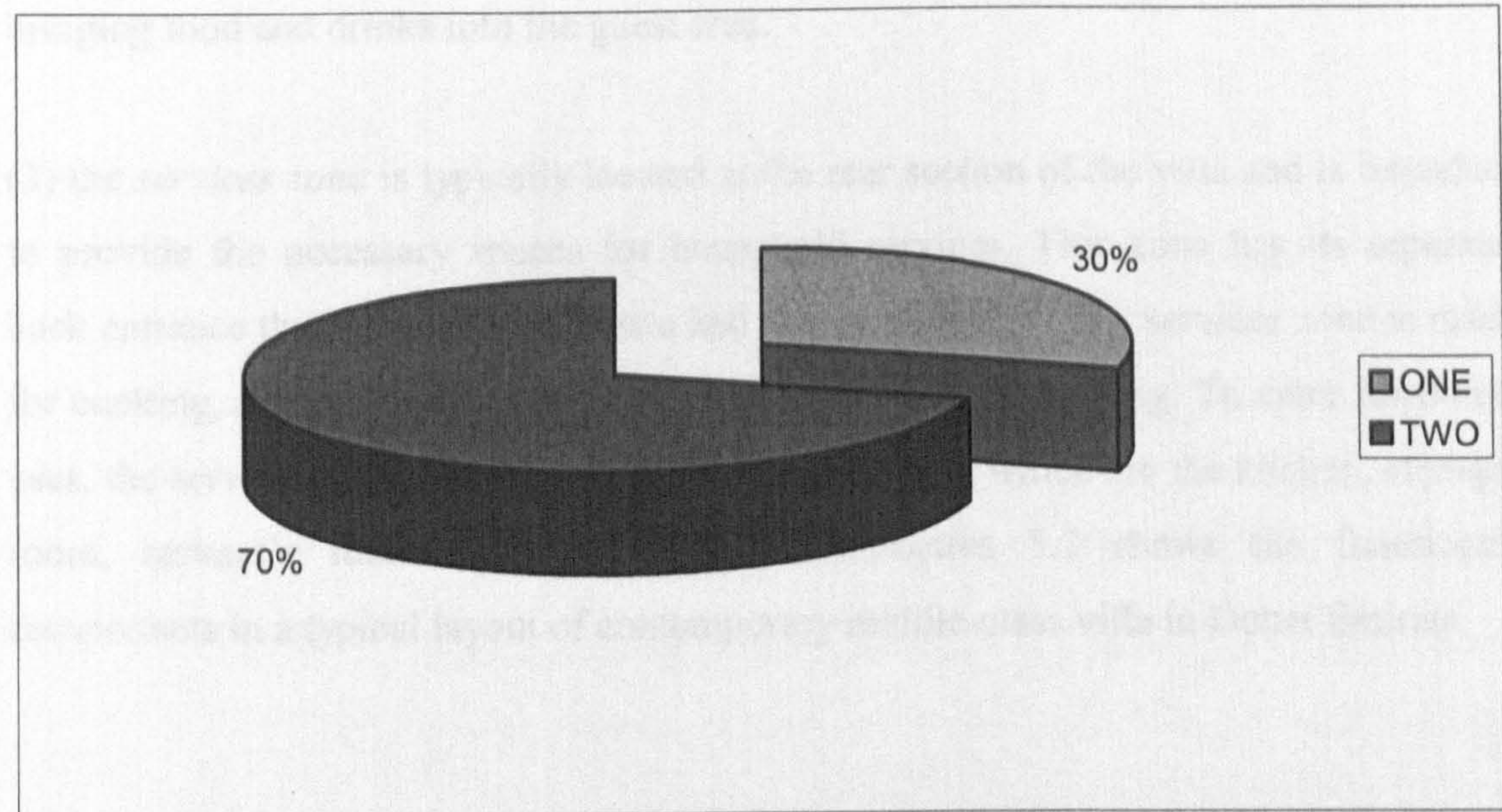
Traditional styles of housing design, such as the courtyard type (*Arabic house*) that dominated Dubai's housing stock until mid 1980s, are no longer preferred by middle-class national households. In fact, most people consider them to be outdated and substandard compared to the villa which to them represents modernity and superior standards.

Building and planning regulations introduced by the Municipality also contributed to people's preferences for villa against more traditional styles of housing. For instance, uniform building setback requirements, that were introduced by modern planning codes, were directly responsible for promoting villa as opposed to other forms of housing types. Furthermore, the Dubai Municipality building permit committee members suspect that anyone who proposes a design of courtyard house must be intending to rent out individual rooms in the house to low-income bachelor expatriates who prefer those types of housing arrangement because of their cheaper rental cost. Therefore even if someone genuinely considers building a courtyard type dwelling unit for his own use, his intentions may be highly doubted by the Municipality and could face numerous hurdles before he is granted approval.



For the middle-class population within this study, villa-type housing was chosen by the entire population sample. Moreover, as shown in figure 5.6, nearly three quarters (70 per cent) of the owner-occupant villa units were built on two floors (i.e. ground plus one) and another 30 percent built only on a single floor.

**Figure 5.6 Number of floors of dwelling units of owners**



Source: fieldwork, 2003-2004

It is widely believed that most homeowners perceive the two-floor villa is important for exposing individuals’ prestige and social status. Unlike a single floor building that can be hidden behind the two metre high compound wall that normally surround the villa, the two-floor villa can be exposed to the outside and be seen by passers-by. Another perceived advantage of the two-floor to single-storey, is that vertical expansion consumes less of the plot area and thus saves land for other uses.

The basic form of the contemporary villa is based on three distinctive spatial zones. (1) the *household zone* which is the main and largest section of the dwelling unit. Its purpose is to provide the space for the daily living, sleeping, entertaining, dining and hygiene requirements of the members of the household. The household zone which is located at the core of the dwelling unit and upstairs within the two-floor dwellings, is accessed through a grand main villa entrance and includes basic spaces such as living rooms, bedrooms, bathrooms and dressing rooms etc.



(2) the *guest zone* is exclusively built for the purposes of hosting guests who are not closely related to the household and cannot be allowed access to the inner parts of the house. It normally includes the main guest reception room, a dining room, a toilet and a multiple washbasin counter. The guest zone has its own special entrance in order to avoid contact with the rest of the home, while its dining room is connected through a secured door that provides a link to the kitchen area for the purpose of conveniently bringing food and drinks into the guest area.

(3) the *services zone* is typically located at the rear section of the villa and is intended to provide the necessary spaces for household services. This zone has its separate back entrance that is used by domestic and delivery persons. The services zone is used for cooking, storing food, laundry and domestic servant's sleeping. To cater for those uses, the services zone includes about four basic spaces which are the kitchen, storage room, servant's room and utilities room. Figures 5.7 shows the functional components in a typical layout of contemporary middle-class villa in Dubai Emirate.



Figure 5.7 The functional subdivision in contemporary middle-class villas in Dubai Emirate

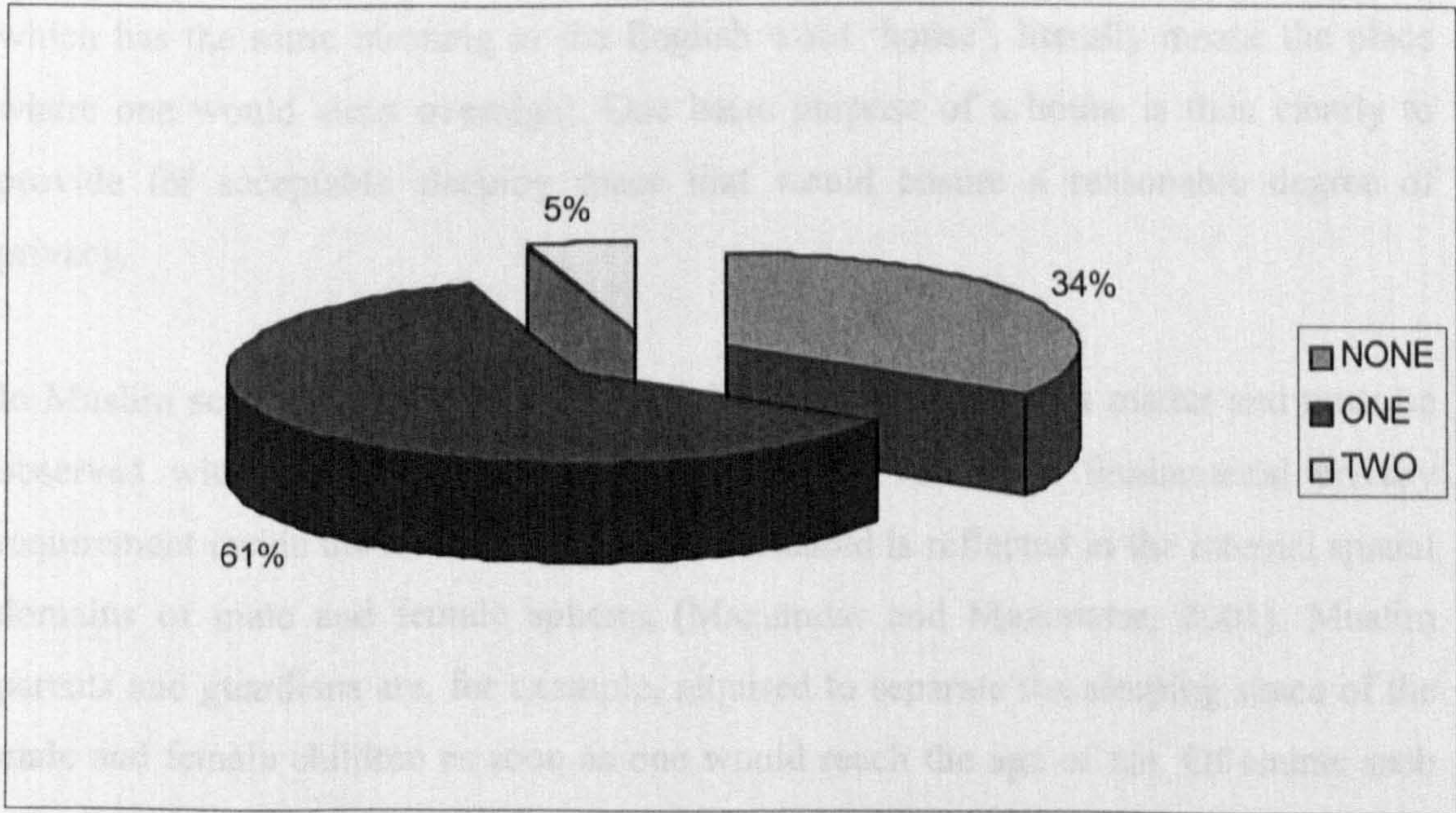




In addition to the main dwelling unit, the construction of an additional accessory or service block (*mulhaq*) has gained some prominence within middle-class households. A typical services block is a strip-shaped structure and includes uses such as the main kitchen used for household's daily meal preparation, a general food store, a servant's room, a laundry room, a toilet, washbasin counters and, perhaps, a dining room. The reason for separating those uses from the main housing unit structure is that households think that the strong smell of cooking spicy food everyday<sup>71</sup> spoils the freshness of air quality inside the house, despite using ventilation fans. Therefore, the majority of households choose to separate the kitchen and other related spaces from the main villa unit.

As indicated in figure 5.8, about two third (61 per cent) of the owner-occupant dwellings contained one service block. Another one third (34 per cent) of the units did not contain any separate service block and integrated all basic and accessory rooms into the main villa. Finally, 5 per cent of the dwellings contained two separate blocks, one for the kitchen and related uses and another that contained the male guest reception room (*majlis*) and its associated dining room, wash basins and toilet.

Figure 5.8 Number of service blocks per dwelling units of owners



Source: fieldwork, 2003-2004

<sup>71</sup> Cooking is mostly done by Asian maids and cooks. The cooking of lunch, for instance, which is the main



### 5.3.4 NUMBER AND SIZE OF ROOMS PER DWELLING UNITS

The following subsections discuss the distribution and analysis of domestic spaces by number and types of rooms in addition to analysis of sizes of rooms by each type. Data on number and distribution of rooms represents actual existing condition (i.e., at the time of fieldwork) captured from respondents' answers on the owner-occupant questionnaire. Furthermore, the data on room sizes is gathered from 95 randomly selected sets of as-built dwelling units' drawings of villas that were financed by the PHFS loans between 1994 and 2002. The floor-plan designs were supplied by ten randomly chosen private consultants. The purpose of room size analysis is to develop an understanding of the sizes of rooms that are built by the study population as this determines both the average size of dwelling units and ultimately the rates of housing space consumption among the study population.

#### 5.3.4.1 NUMBER AND SIZE OF BEDROOMS

A bedroom in Dubai, as well as in the rest of the UAE, is known as *ghurfat-nawm*, which literally means the sleeping-room. Bedrooms are the most basic spaces in housing units within most human societies. Interestingly enough, the Arabic word *bait* which has the same meaning as the English word 'house', literally means the place where one would sleep overnight. One basic purpose of a house is then clearly to provide for acceptable sleeping space that would ensure a reasonable degree of privacy.

In Muslim societies, for instance, personal privacy is a religious matter and must be observed within both private and public spaces. The most fundamental privacy requirement inside the home of a Muslim household is reflected in the internal spatial domains of male and female spheres (Mazumdar and Mazumdar, 2001). Muslim parents and guardians are, for example, required to separate the sleeping space of the male and female children as soon as one would reach the age of ten. Of course such principles are introduced to prevent what is perceived by the religion as immoral deeds such as incest and, perhaps, other behavioural problems.



By virtue of their use and nature, bedrooms are the most private of spaces, therefore, they are least accessible by outsiders. In modern villas as it was in traditional courtyard houses, bedrooms are normally secluded in separate sections of the house (i.e., away from the main entrance of the villa) or they are in the upper floor which is usually designated entirely for household uses only. Such practices provide extra control over the access to bedrooms.

In contemporary middle-class homes there are two general types of bedroom. First, there is the en-suite master bedroom which is typically larger than other bedrooms and it is designated for the parents. Second, there are the other bedrooms which are smaller than the master bedroom and are designated for the children of various ages.

Moreover, 11 per cent of dwelling units covered in this study contained guest bedrooms intended for the use of guests who are expected to stay overnight with the household. Guest bedrooms are always built on the ground floor, adjacent to the guest reception room (*majlis*) and are kept as far as possible from other bedrooms that exist on the same floor.

Bedrooms are furnished and decorated with various items that are either purchased from local furniture showrooms or they are custom-made by specialised furniture making shops. The floor of the majority of bedrooms are covered with carpets and selected rugs. Wall papers of different colours and patterns are quite often used for covering the interior walls of the bedrooms in middle-class homes of Dubai Emirate.



**Plate 5.1 A corner view of an interior of a master bedroom**

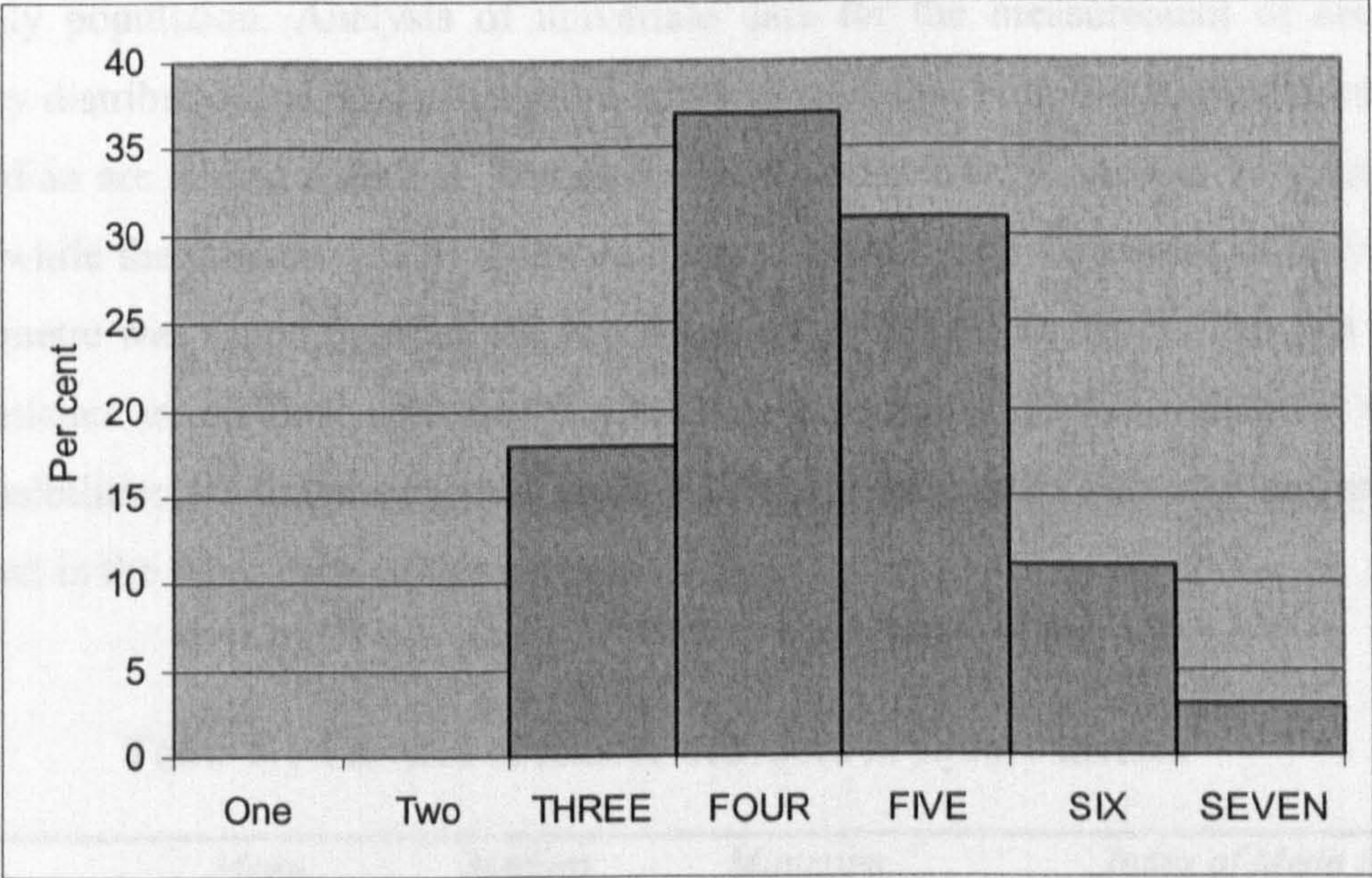
*Source: fieldwork, 2003-2004*

However, some bedrooms are painted with plain wall paint. Master bedrooms are typically furnished with imported Italian or Spanish made bedroom sets which include king size beds supported with huge and often elaborate headboards, wardrobes and dressing tables. Most master bedrooms have between two and three large double-glazed windows which are covered with long and wide custom-made curtains. Bedrooms are also decorated with chandeliers and wall-mounted lighting fixtures that match with other decorative elements.

The results of the owner-occupant survey include specific data on the number of all types of room that existed in every dwelling unit included in the survey. The number of bedrooms per dwelling unit within the middle-class population included in this study range between three and seven bedrooms as shown in figure 5.9.



**Figure 5.9 Distribution of number of bedrooms for owner-occupants**



*Source: fieldwork, 2003-2004*

Dwellings with only three bedrooms, which were predominantly found within low-middle households, constitute only 18 per cent of the population. Four bedroom dwellings made up the biggest proportion of homes with 37 per cent and another 31 per cent of the dwellings were those provided with five bedrooms. This brings the total share of 4 and 5 bedroom dwellings to 68 per cent of all middle-class dwelling units. The survey also reveals that 11 per cent of dwellings had six bedrooms and finally 3 per cent of the dwellings included the highest number of bedrooms which was seven. Most of the six and seven bedroom dwellings were those which had a designated guest bedroom and they were also mostly concentrated among the high-middle households.

**SIZE OF BEDROOMS**

In addition to the above discussion on the number of bedrooms per dwelling unit, this section covers another important aspect of dwelling unit size which addresses the existing trends regarding the actual sizes and areas of bedrooms being built by middle-class households and particularly those financed by subsidised government loans.



Table 5.1 includes selected basic statistics on the sizes of master bedrooms built by the study population. Analysis of univariate data for the measurement of central tendency distribution of master bedroom size indicates that both the arithmetic mean and median are almost identical. The mean for the master bedroom was 31.4 square metres while the median was 31.2 square metres. A negligible difference of only 0.2 square metre was found between the two measures of central tendency. The fact that both statistics are so close indicates that the data is probably fairly symmetrical with low possibilities for the presence of major outliers or long tails. This will be further examined in the latter parts of this section.

**Table 5.1 The size of master bedroom in square metres**

	<i>Mean</i>	<i>Median</i>	<i>Minimum Standard</i>	<i>Index of Mean to Minimum Standard</i>
<i>M. Bedroom</i>	<i>31.4</i>	<i>31.2</i>	<i>9.3</i>	<i>3.38</i>

*Source: fieldwork, 2003-2004*

The same table also shows that the minimum standard for a residential room<sup>72</sup> in the Dubai Emirate building code is 9.3 square metres (i.e. 100 square feet)<sup>73</sup>. The index of the mean of master bedroom size to the minimum standard of a residential room is 3.38 which clearly shows that the mean of the actual master bedroom room size in the middle-class dwellings is nearly 3.4 times the minimum room size included in the building code.

<sup>72</sup> Article 8 of the Dubai Emirate Building Code includes the minimum standards for room sizes of various types and uses. For residential buildings, the code includes rooms such as residential room, kitchen, maid's room, bathroom and toilet. The minimum standards for room size were reached after analysis was done on several alternative room sizes, in which most common types and sizes of furniture, gadgets and fittings were tested. In addition to the overall minimum room size, the standards also include minimum dimension of room width.

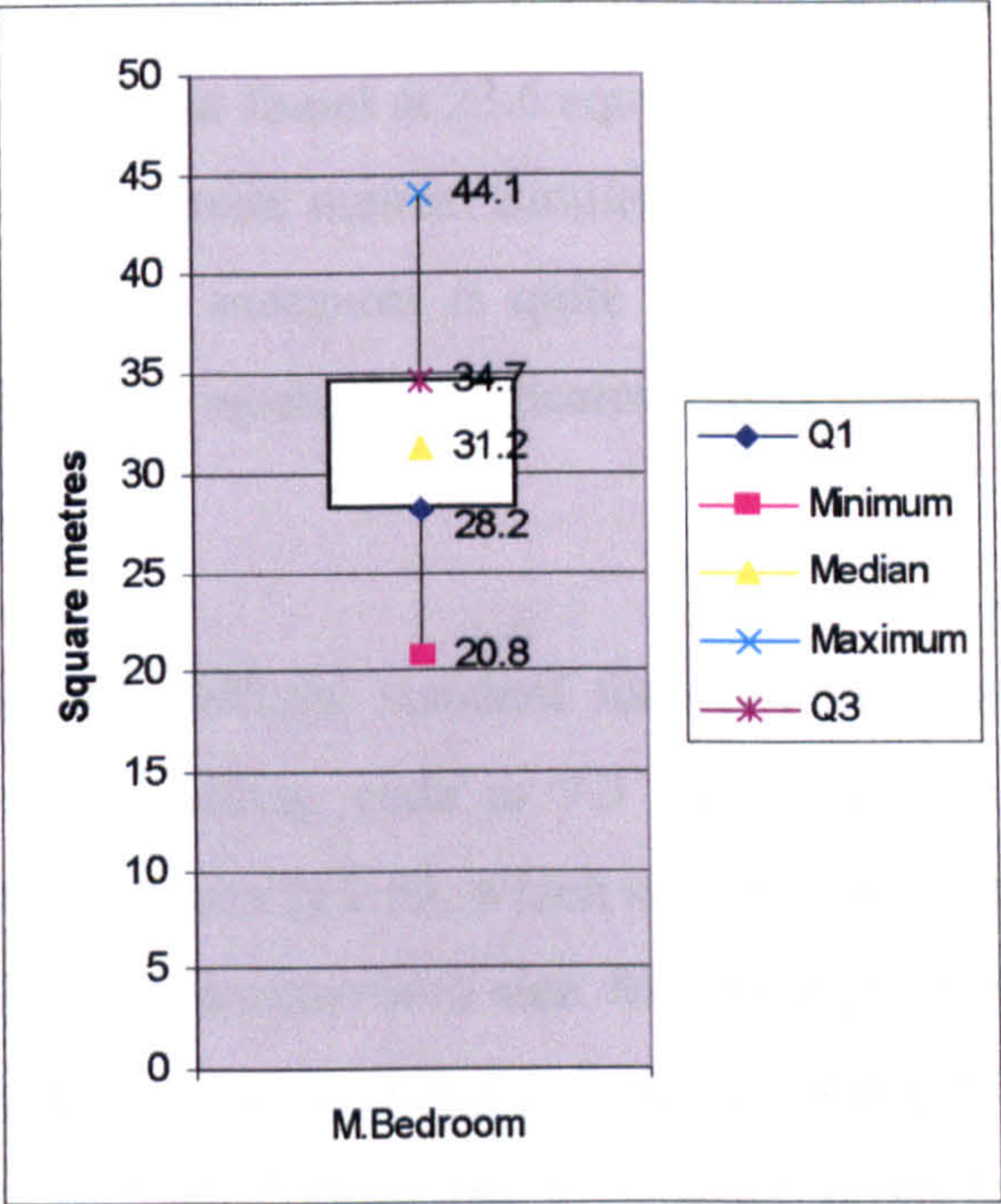
<sup>73</sup> Compare this with, for instance, the 70 square feet (about 6.5 square metres) minimum standard for a residential room used by an adult as per the British Housing Act of 1985. Furthermore, the same Act also allows the minimum room size of 50 square feet (about 4.6 square metres) for a residential room occupied by a child of one to ten years old (Goodchild, 1997: 89).



Figure 5.10 Master bedroom size

Figure 5.10 is a boxplot that includes the “five-number summary” of a distribution of data for master bedrooms. The five number summary includes the minimum, the first quartile, the median, the third quartile and the maximum. The box embraces the middle 50 per cent of the cases which represents the area between the 25<sup>th</sup> percentile to the 75<sup>th</sup> percentile.

In the case of the master bedroom samples and as shown in figure 5.10, the minimum room size value (i.e. the smallest value in the sample) was 20.8 square metres, which is more than double that of the size of minimum residential room standard determined in the Emirate’s official building code.



The value for the first quartile was 28.2 square metres. The median value which was recorded at 31.2 has an index value of 3.35 compared to the minimum room size standard and is located almost at the centre of the box, a fact that provides another indication that the data is approximately symmetric. The third quartile figure is 34.7 square metres (with an index of 3.73 to the minimum room size standard), and finally the maximum room size found in this sample was 44.1 square metres. Statistical analysis shows that the data used in the analysis of master bedroom size has a positive skewness<sup>74</sup> value of (0.146), therefore, it can be statistically confirmed that data has a slight longer upper tail (i.e. there are more values above the mean than below it). However, such small skewness value also indicates that the data set for the master bedroom size come from a fairly normal distribution.

<sup>74</sup> The *skewness* measures how symmetric the data is. Data from a normal distribution will have a skewness value of around zero. Data with a long upper tail will have a positive value, while data with a long lower tail will have a negative value. Typically, the skewness value will range from negative 3 to positive 3.



Table 5.2 includes the data on the size of other bedrooms (i.e., non-master bedrooms) in the homes of the middle-class population. Descriptive statistical analysis of the data shows that the arithmetic mean of bedroom size was found at 23.6 square metres. The median on the other hand was recorded at 23.4 square metres. Similar to the case of master bedroom, the difference between the two measures is quite small with the mean being larger by only 0.2 square metres. Once again, this indicates that in general the data set is very likely to be symmetrical.

Data presented in table 5.2 also shows that the official standard for the minimum room size in the Dubai Emirate as per the building code is 9.3 square metres. Therefore, the index of the mean for the bedroom size is 2.53, which suggests that the average bedroom size is 2.5 times the standard minimum room size. Moreover, on the average a master bedroom in the middle-class homes in Dubai is larger by some 33 per cent than other non-master bedroom, which emphasizes the importance given to the master bedroom as compared to other bedrooms in the homes of middle-class. Master bedrooms are also made bigger than other bedrooms because they are intended for the use of couples rather than one person as in the case of other bedrooms.

**Table 5.2 The size of bedrooms in square metres**

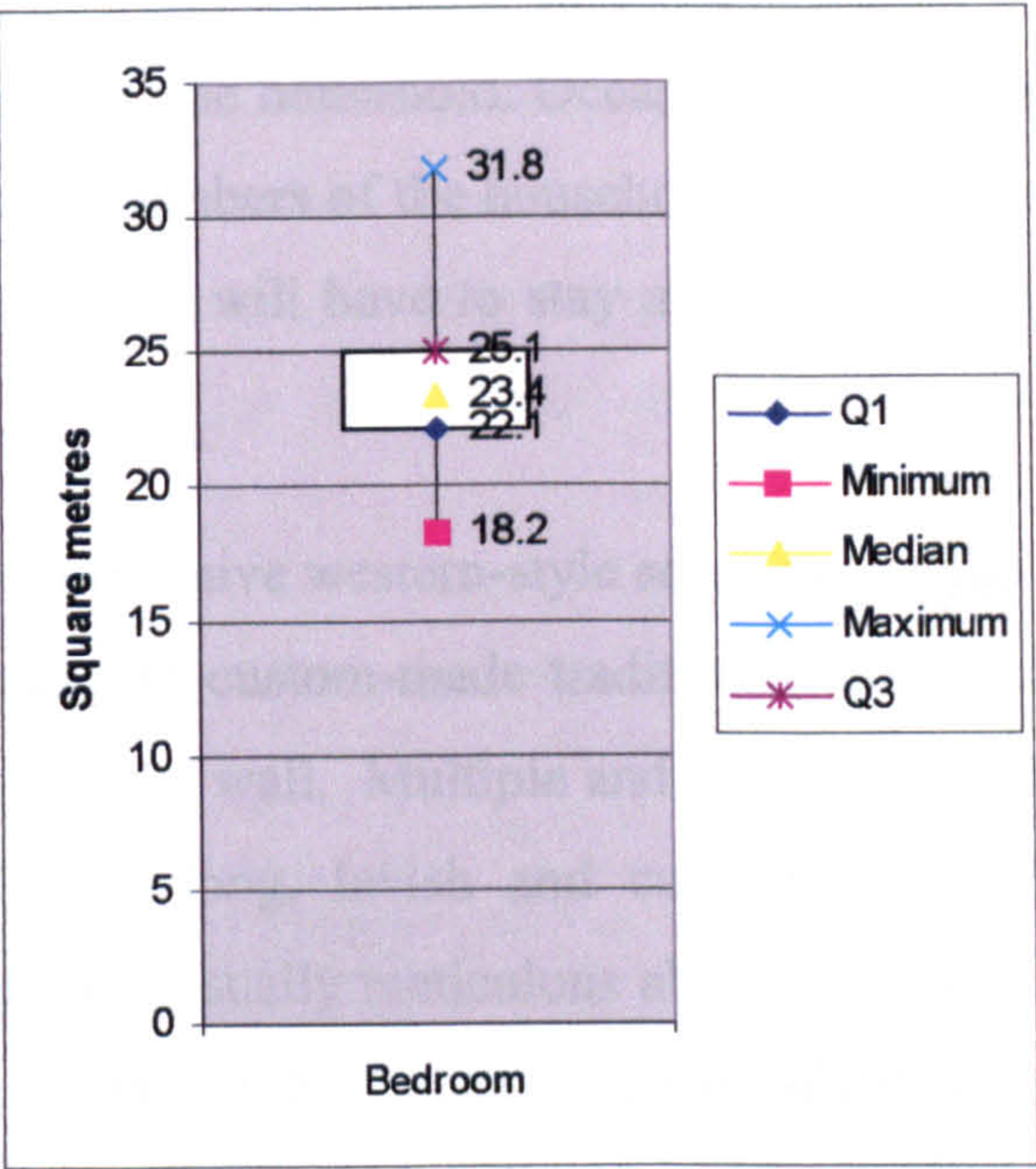
	<i>Mean</i>	<i>Median</i>	<i>Minimum Standard</i>	<i>Index of Mean to Minimum Standard</i>
<i>Bedroom</i>	23.6	23.4	9.3	2.53

*Source: fieldwork, 2003-2004*



Figure 5.11 bedroom size

Figure 5.11 presents the five-number summary statistics for the bedroom size. The smallest room size sample found within the study was 18.2 square metres which is almost double the size of Dubai’s minimum standard for a residential room. First quartile figure is 22.1 square metres while the third quartile value is 25.1 square metres (with an index value of 2.7 to the minimum standard room size). The median value which falls slightly below



the centre of the middle 50 per cent is 23.4 square metres and has an index of 2.51 compared to the minimum standard. The largest room size found in the sample was 31.8 square metres, about 6.7 square metres above the third quartile. Most noticeably, the data shows that the sample has a relatively high positive skewness value of (0.710), this indicates that the data applied in the analysis of bedroom size includes more values above the mean.

5.3.4.2 NUMBER AND SIZE OF LIVING ROOMS

The living-room (*saala*) is a fairly new type of domestic housing space for households in Dubai Emirate. In fact it has only been introduced about four decades ago with the advent of villa and apartment types of housing units. At the beginning, only rich families who were able to build villas had living rooms. However, as villas became more widely accessible and desirable by households of other income groups, living rooms have become important basic spatial elements of every home. Moreover, living rooms are also found in most apartments that are predominantly occupied by expatriates.

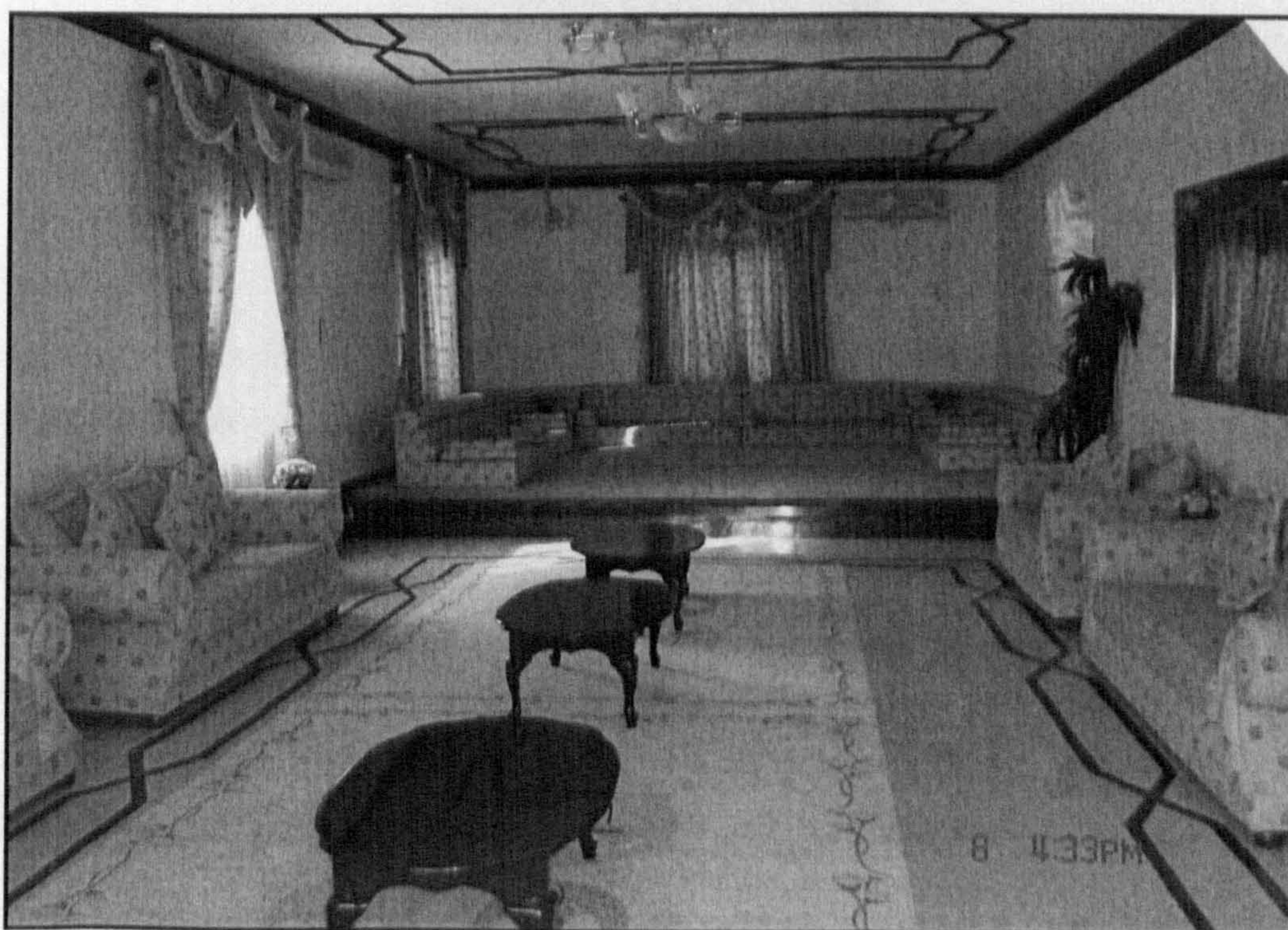
Living rooms in homes of nationals in Dubai Emirate are mostly positioned at the centre of the villa and are primarily used for household gathering, sitting and entertaining purposes. This is a shared space in which the members of the household



can meet, watch satellite television channels and chat about all kind of issues. Because of privacy concerns, normally only very close relatives would be allowed access to this space in the presence of female members of the household. Occasionally, female guests are hosted in the *saala*; however, male members of the household (i.e., grown-up sons who have reached puberty and husband) will have to stay away during the time when female guests are present.

Nowadays, living rooms are furnished with expensive western-style sofas and coffee-tables. But some households use both sofas and custom-made traditional low-level sitting mats and cushions that are lined against the wall. Multiple and large glass and aluminum framed windows are covered with long, lavish and custom designed curtains. Females (i.e., wives and daughters) are usually meticulous about the overall decoration and presentation of the living rooms in the house. Colours of different decorative and furnishing elements are carefully matched and contrasted, pieces of expensive furniture and paintings are purchased or custom-made according to the taste of the household.

**Plate 5.2 An interior of a living room (saala) furnished with both sofa and traditional sitting suites**

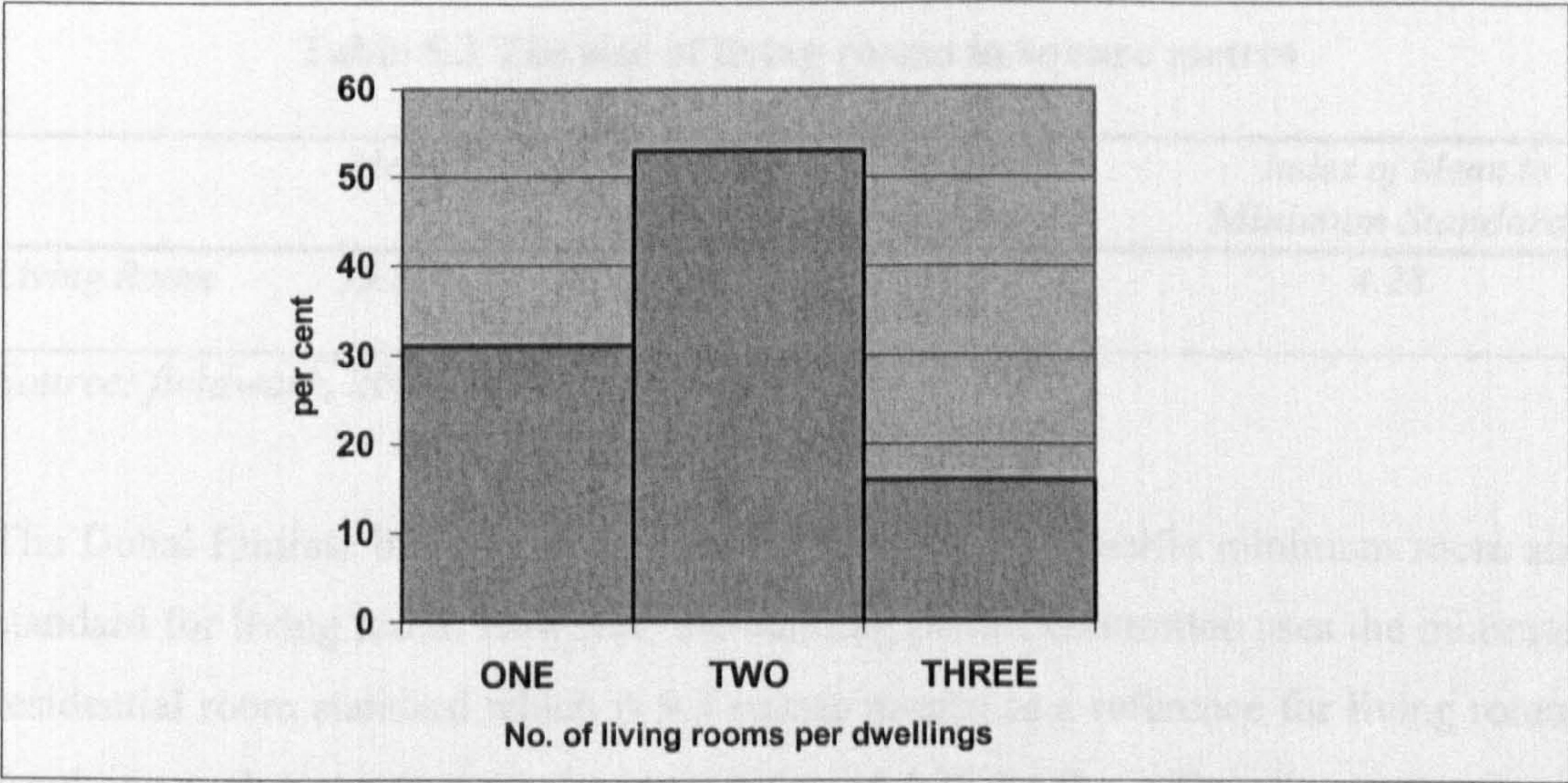


*Source: Fieldwork, 2003-2004*



Shiny marble and granite of different colours and shapes are used to cover the floor of most living rooms within the contemporary middle-class homes in Dubai Emirate. However, some households still prefer using carpets for their living rooms and others would place selected rugs that would match with the floor marble and other elements of the interior decoration. The ceilings of living rooms are quite often decorated with geometrically-shaped or flower-shaped false-ceiling decoration made of gypsum-board materials.

**Figure 5.12 Distribution of number of living rooms for owner-occupants**



*Source: fieldwork, 2003-2004*

According to the results of the owner-occupant survey and as shown in figure 5.12, nearly one third (30 per cent) of dwellings had one living room. Houses with one living room were mostly those that were built as one floor, while two-floor houses had two or even, in a few cases, three living rooms. More than half (54 per cent) of homes had two living rooms. In two-storey villas there is normally one living room in the ground floor and another in the upper floor. Data has also revealed that 16 per cent of homes had three living rooms/ family halls.

**SIZE OF LIVING ROOMS**

Spatial data on the size of rooms within middle-class homes clearly indicate that, on the average, living rooms are by and large the largest among all rooms found in the



homes of contemporary middle-class households in Dubai Emirate. Overall layouts of living rooms take different shapes, while most of them are rectangular or square-shaped, some are designed in irregular, circular or semi-circular shapes.

Table 5.3 includes a summary of descriptive statistics that show the arithmetic mean for this type of rooms at 39.8 square metres and the median is slightly larger at 40.8 square metres. There is only a one square metre difference between the two measures of central tendency. This suggests a high probability that the data is fairly symmetrical.

**Table 5.3 The size of living rooms in square metres**

	<i>Mean</i>	<i>Median</i>	<i>Minimum Standard</i>	<i>Index of Mean to Minimum Standard</i>
<i>Living Room</i>	39.8	40.8	9.3	4.28

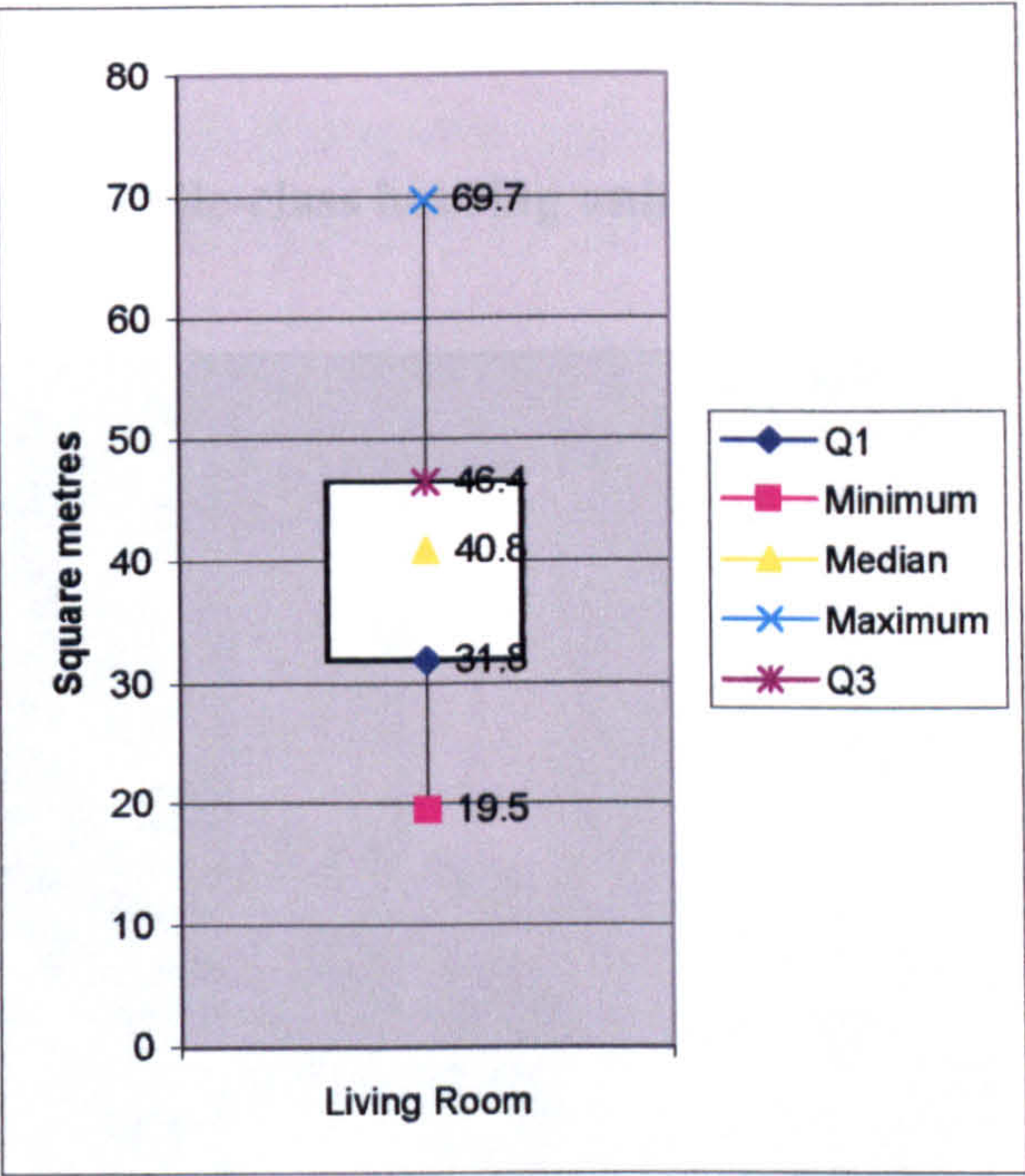
*Source: fieldwork, 2003-2004*

The Dubai Emirate building code does not include any specific minimum room size standard for living room. However, the building permit committee uses the minimum residential room standard which is 9.3 square metres as a reference for living rooms. Applying such a standard results in an index of 4.28 for the arithmetic mean value as compared to the minimum standard. This simply shows that, on the average, the size of a living room in middle-class homes is nearly 4.3 times the minimum official standard.



Figure 5.13 The size of living-rooms

Figure 5.13 presents the five statistics summary for the size of living room. The minimum living room size found in the sample was 19.5 metres. First quartile value was 31.6 square metres while third quartile was 46.4 square metres with an index of 4.99 in relationship to the minimum standard. Statistical analysis revealed that the median value which is 40.8 square metres was slightly above the centre of the middle 50 per cent segment,



indicating that the data has a slightly longer upper tail. The maximum living room size found in the sample was 69.7 square metres. The living room size scores displayed a small positive skewness value of (0.252). Statistically, it can be concluded that the data set used for analyzing living room size is approximately symmetrical and is drawn from a close to normally-distributed base.

5.3.4.3 NUMBER AND SIZE OF DINING ROOMS

Dining room (*ghurfat taam*) is also a fairly new type of housing space that was unknown in the traditional pre-oil period even within the homes of upper class merchants. During those times dining used to take place in one of the bedrooms or in the roofed veranda (*liwan*) and guests were served food in the guest reception room (*majlis*). Food was served on the floor using different size mats (*suffra*) during which family members or guests would gather around the mat in circles of various sizes depending on the number of people.

Even until the late 1980s, only upper income households had special rooms designated for dining purposes, while people of middle and low income continued using other rooms for dining purposes. By the early 1990's, middle-class households



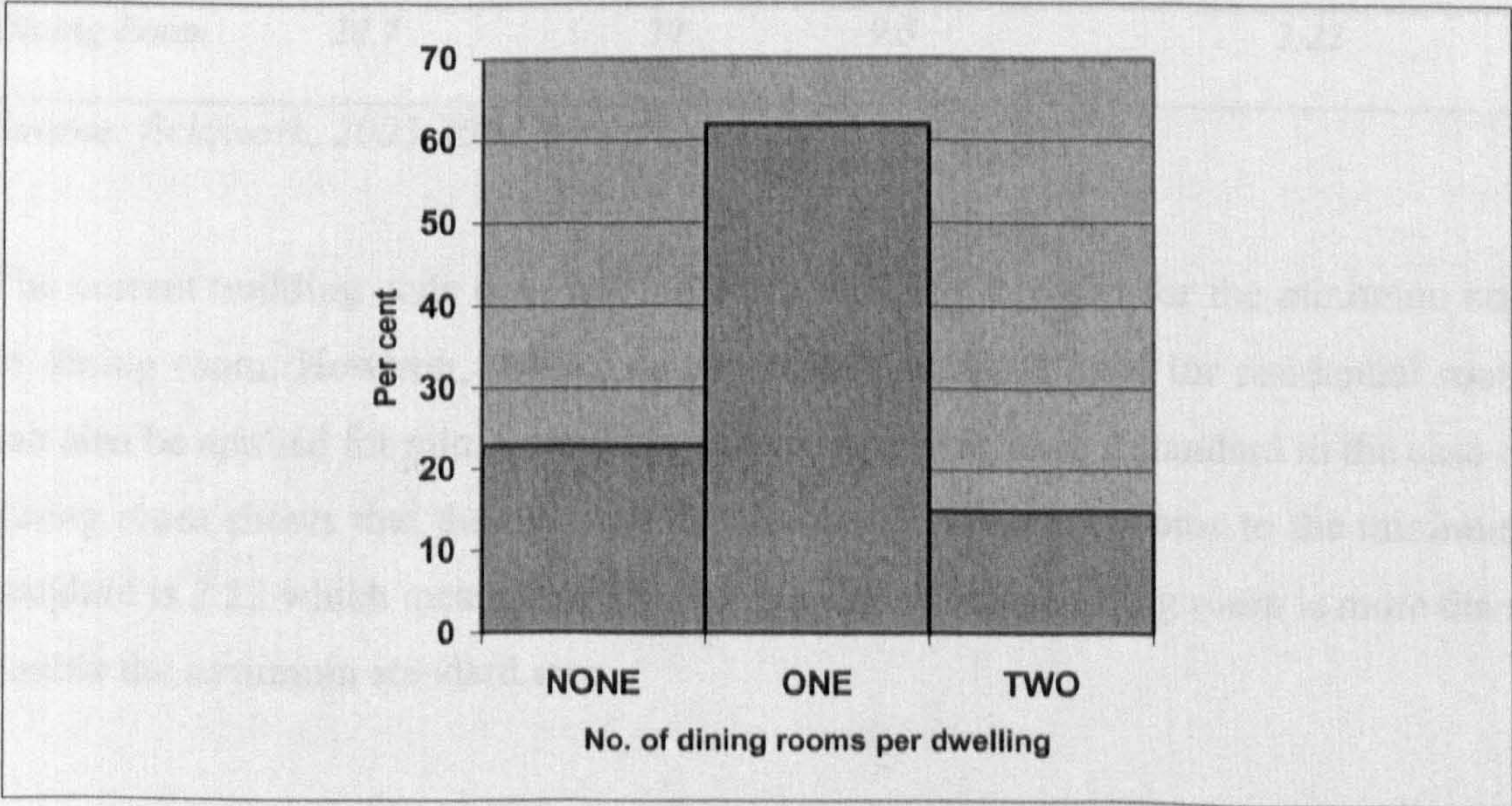
started to include dining rooms into their newly built homes. Since then, this type of space has gained more popularity and most middle-class homes include special rooms for dining.

**Plate 5.3 A dining room in a middle-class housing unit in Dubai**



Source: fieldwork, 2003-2004

**Figure 5.14 Distribution of number of dining rooms per dwelling units**



Source: fieldwork, 2003-2004



As shown in figure 5.14, results of the owner-occupant survey have shown that less than a quarter (i.e., 23 per cent) of homes do not include any dining rooms. The greater majority were those belonging to the low-middle income households. More than two third (62 per cent) of dwellings had one dining room and another 15 per cent of households had two rooms designated as dining rooms. In such cases, one dining room was built for household use and another was attached to the guest reception room (majlis) intended to be used when guests were invited over. Typically, dining rooms in middle-class homes are furnished with dining table sets of between 8 and up to 24 chairs (depending on the size of the room) and a china cabinet closet that matches with the rest of the dining set.

SIZE OF DINING ROOMS

A summary of basic statistics on the size of dining rooms is given in table 5.4. General analysis shows that, within our sample, the arithmetic mean for dining room size is 20.7 square metres and the median is 20 square metres, only smaller by 0.7 metre.

Table 5.4 The size of dining room in square metres

	<i>Mean</i>	<i>Median</i>	<i>Minimum Standard</i>	<i>Index of Mean to Minimum Standard</i>
<i>Dining Room</i>	20.7	20	9.3	2.22

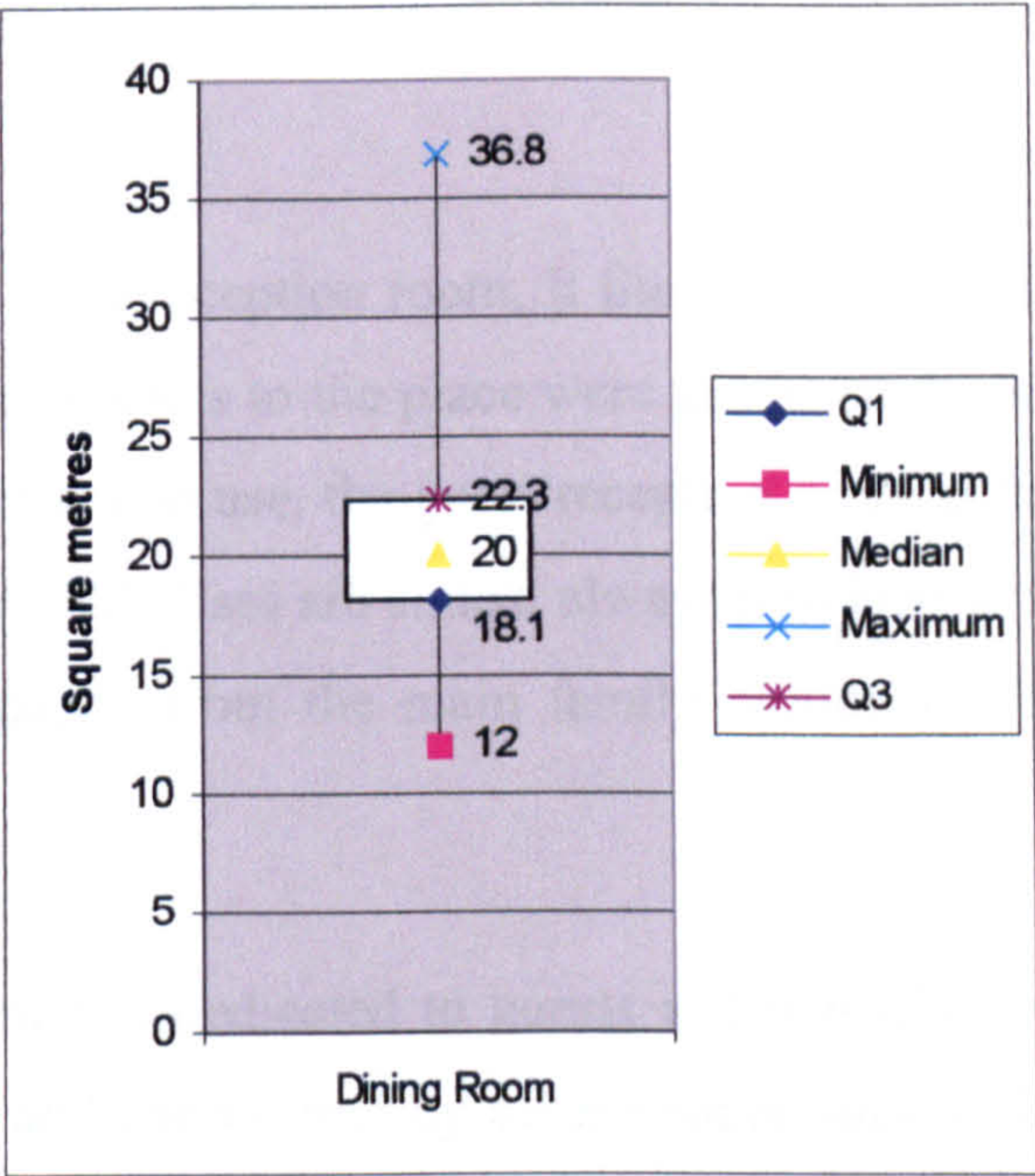
Source: fieldwork, 2003-2004

The current building code does not include a separate standard for the minimum size of dining room. However, the 9.3 square metres standard used for residential room can also be applied for minimum dining room. Applying such a standard in the case of dining room shows that the index of the mean size of dining rooms to the minimum standard is 2.22 which means that the average size of actual dining room is more than double the minimum standard size.



Figure 5.15 The size of dining rooms

Figure 5.15 shows the five statistics summary. The smallest dining room found in the sample was recorded at only 12 square metres. First quartile value was 18.1 square metres and third quartile score in this sample was 22.3 square metres with an index of 2.4 compared to the minimum standard. The median is positioned very slightly below the centre of the interquartile box at a value of 20 square metres. However, the dining room samples display a high positive skewness value



of 1.214, suggesting that the sample has a noticeably longer upper tail, meaning that a broader range of values are located above the arithmetic mean. Finally, the maximum dining room size found in this sample was noted at 36.8 square metre, which is 16.8 square metres larger than the median size room.

5.3.4.4 NUMBER AND SIZE OF GUEST RECEPTION ROOMS

Showing generosity and the practice of inviting guests into the homes of Arabs have long historical roots (Patai, 2002). This tradition was found in all sorts of Arab communities, whether they were nomadic people living in tents, or rural settlers, or even dwellers of major urban centres. Of course, families with better economic resources were more able to show generosity to their guests in more elaborate fashions. However, every family is expected to offer hospitality to its guests as this was and still is essential for maintaining a positive image in the community. Furthermore, as one’s economic status is improved one is naturally expected to show this in the way hospitality is offered.

During the traditional pre-oil era, only merchants and politically privileged families had specially designated rooms for receiving guests, while the poor working class



would normally use one of the bedrooms in the house for this purpose. With the advent of oil and increase in household affluence, coupled with increasing housing subsidies, the guest reception room became a permanent and key element in the design of all middle-class homes.

*Majlis*<sup>75</sup> is the Arabic word used for the guest reception room. It literally means '*the place of sitting*'. Of course, in this context it refers to the place where guests sit during their visits. By virtue of its purpose and intended use, the guest reception room is the most accessible domestic space to outsiders. Majlises are almost always provided with their special front entrances that are separate from the main family section of the house.

Because the *majlis* is the space that is entirely dedicated to guests and it is also the only room that can be fully experienced and appreciated by other people outside the household, it plays a unique role in portraying the social and economic status and taste of the household to outsiders. Therefore, most households tend to give the *majlis* special attention during its design and furnishing process. There is a widespread popular belief that a larger *majlis* is often seen as an important sign for a household's economic affluence and social standing.

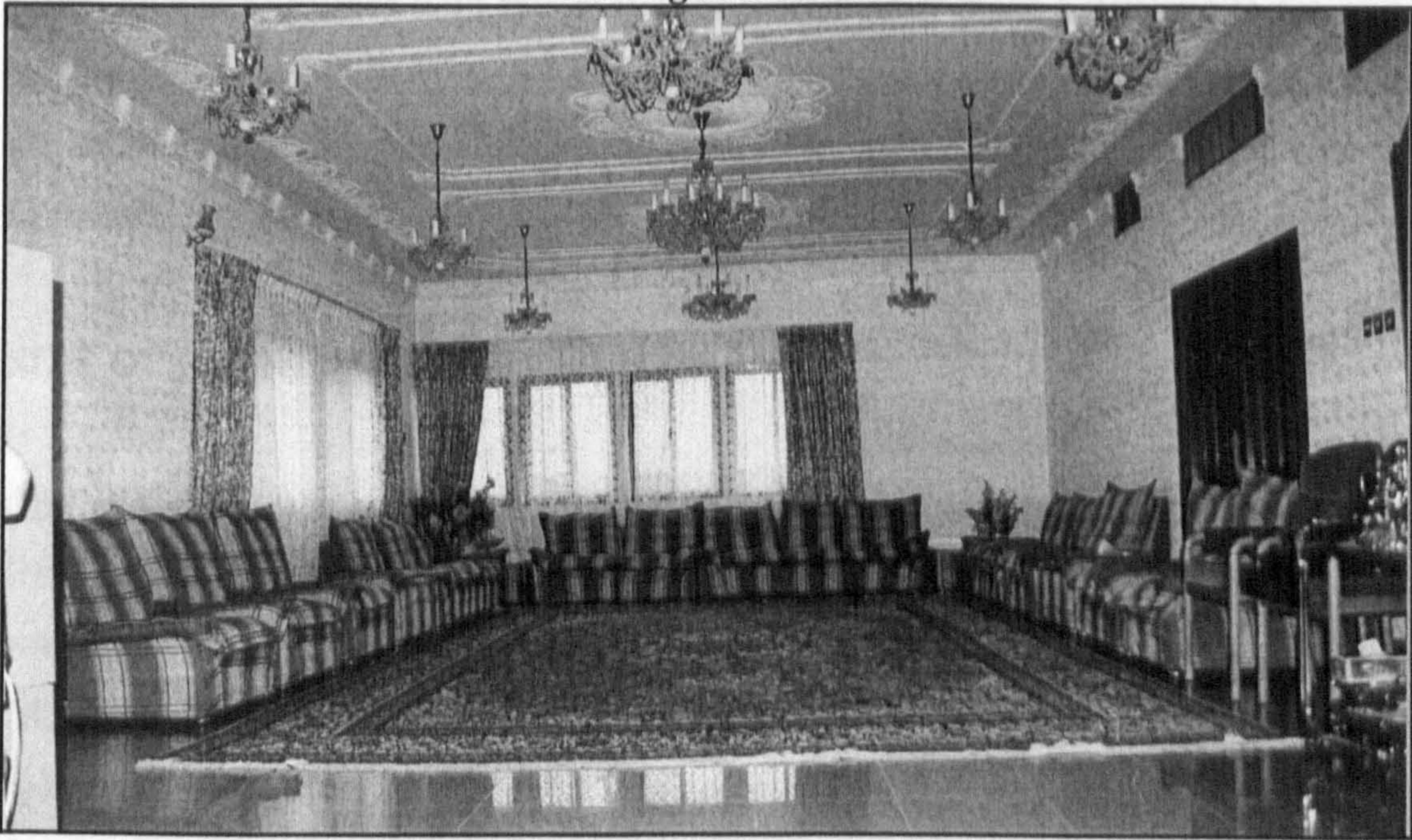
Additionally, the decorative and furnishing elements used in presenting the *majlis* to the visitors also receive special care. In contemporary dwellings, the *majlis* is furnished with sofa sets that are either custom-designed or ready-made. The floors of most guest reception rooms are finished with square or rectangular shape marble and granite tiles. Large and colorful rugs are also used to add beauty to the interior of the *majlis*. Guest reception rooms are also decorated with several chandeliers of expensive crystal and glass finishing. The ceilings of guest reception rooms are also ornamented with elaborate gypsum false-ceiling decoration of artistic appearance.

---

<sup>75</sup> In the local UAE dialect, *majlis* is pronounced '*meelas*'. In the formal Arabic language the word *majlis* has other meaning such as council, board and parliament.

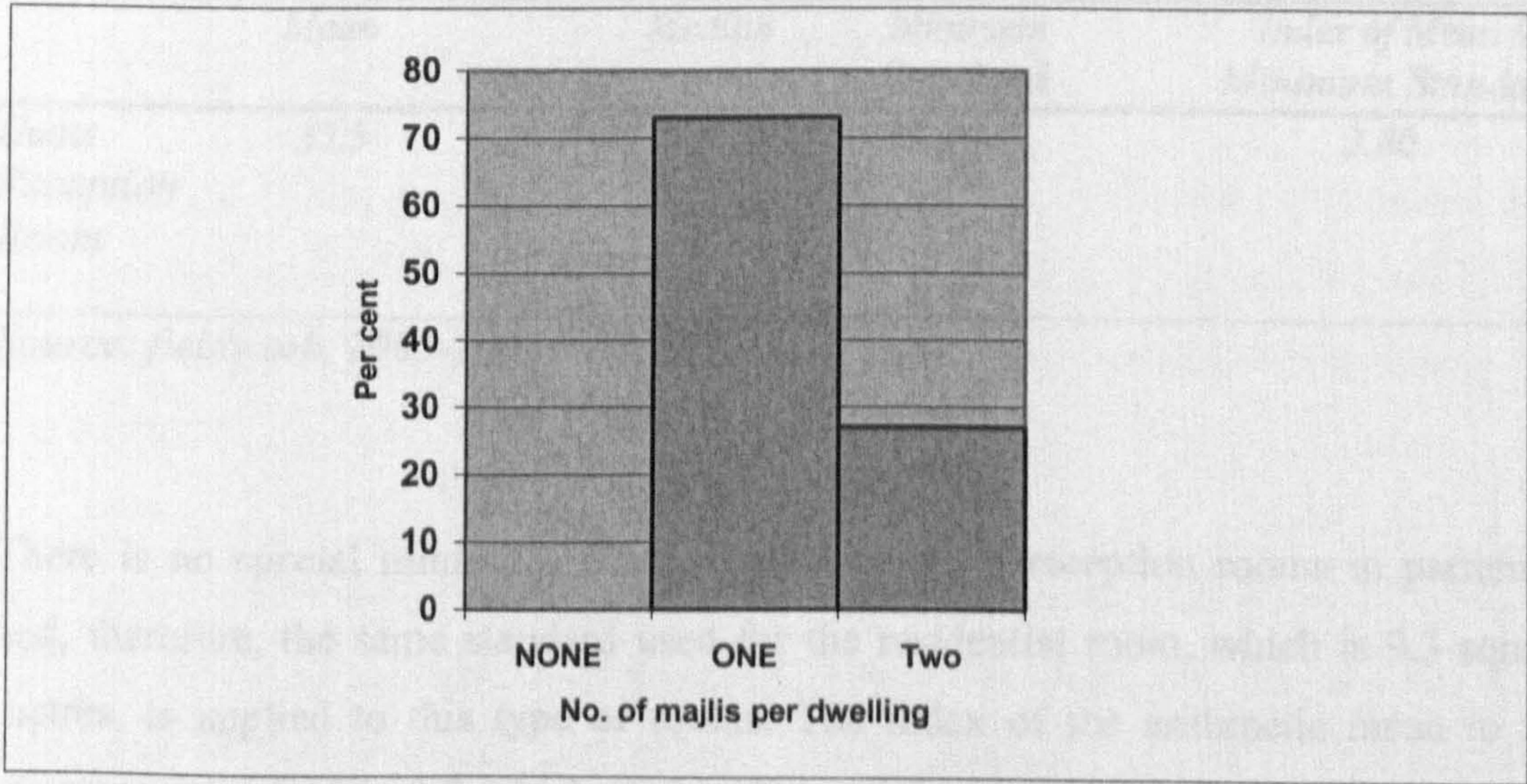


**Plate 5.4** An interior of a guest reception room (majlis) in a middle-class housing unit in Dubai



Source: fieldwork, 2003-2004

**Figure 5.16** Distribution of guest reception rooms (majlis)



Source: fieldwork, 2003-2004

The results from our owner-occupant survey have shown that all middle-class households have *majlis* in their homes. Figure 5.16 shows that 73 per cent of the dwellings have one majlis. The data also reveals that nearly one third (i.e. 27 per cent) of households had two guest reception rooms. In this case, one room is dedicated for



male guest reception, while the other room is exclusively used as a female guest reception room. Homes with two *majalises* were mostly those belonging to the mid-middle and high-middle income households. In general, female guest reception rooms are smaller than their male counterparts, but they are equally important in terms of decoration and furnishing.

SIZE OF GUEST RECEPTION ROOM

On the average, the guest reception rooms are the second largest single rooms after living rooms. Table 5.5 shows that the arithmetic mean for the guest reception room was 35.3 square metres, while the median was smaller by exactly one square metre at 34.3 square metres. Having visually surveyed several dozen existing guest reception rooms in middle-class homes, it became apparent that they were mostly designed and furnished to hold from about ten to perhaps twenty or more guests at a time .

Table 5.5 The size of guest reception rooms (majlis) in square metres

	<i>Mean</i>	<i>Median</i>	<i>Minimum Standard</i>	<i>Index of Mean to Minimum Standard</i>
<i>Guest Reception Room</i>	35.3	34.3	9.3	3.80

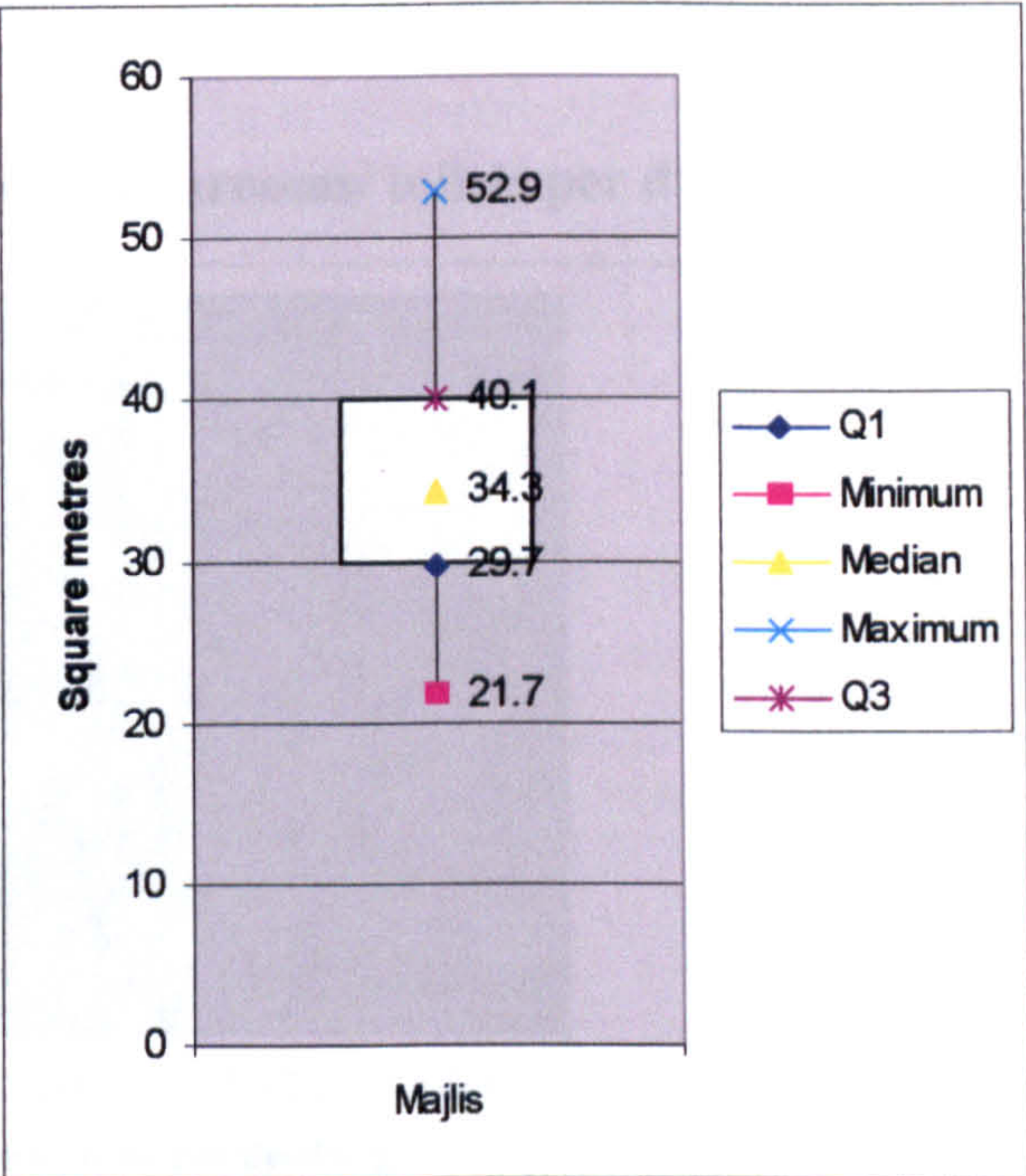
Source: fieldwork, 2003-2004

There is no special minimum standard size for guest reception rooms in particular and, therefore, the same standard used for the residential room, which is 9.3 square metres, is applied to this type of rooms. The index of the arithmetic mean to the minimum standard is 3.8 which shows that, on the average, the actual size of guest reception rooms that typically exist in middle-class homes is 3.8 times the minimum official room standard. This indicates that this type of rooms has special importance both in terms of size and appearance.



Figure 5.17 The size of guest reception rooms

Figure 5.17 presents the five-number summary for the size of guest reception rooms. The smallest guest reception room found in this sample was 21.7 square metres. The value for the first quartile was recorded at 29.7, while third quartile value was 40.1 square metres with an index of 4.31 compared to the minimum standard. The median is located almost at the centre of the box at 34.3 square metres. Finally, the maximum guest reception room size included in this



sample was 52.9 square metres. Descriptive statistical analysis shows a slight positive skewness value of (0.349), indicating that the sample has more values above the arithmetic mean.

5.3.4.6 NUMBER OF BATHROOMS/ TOILETS

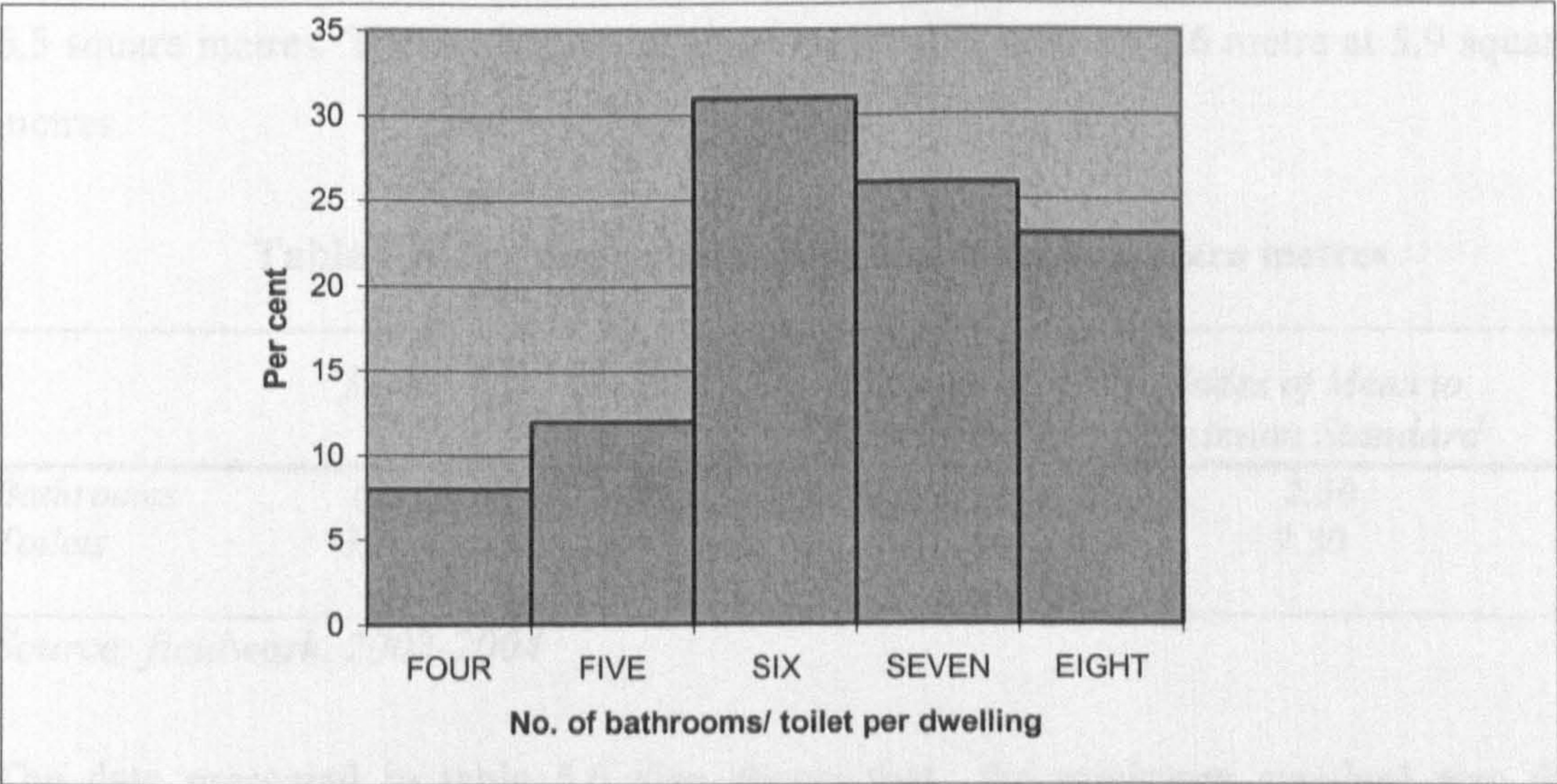
Until the late 1960s, a substantial proportion of the poor and low income households in Dubai did not have access to domestic sanitary facilities. As economic conditions started to improve in the early 1970s all new homes were provided with bathrooms and toilets.

The floors and walls of bathrooms and toilets in contemporary housing units are covered with ceramic and, in some cases, marble tiles that are chosen from huge selections of both imported and locally made materials by each individual home owner. Most owners choose different colours and shapes of ceramics for each bathroom to make them look different from each other. Expensive imported water-closets (wc), bidets, shower rooms, regular bath-tubs and, in many cases, Jacuzzi size tubs that match the colour of floors and walls are installed in the bathrooms. I have noticed from field observation of houses that were under construction that a good



number of bathrooms in the master bedroom were fitted with both a bath-tub and a shower room.

**Figure 5.18 Distribution of number of bathrooms/ toilets per dwelling units**



*Source: fieldwork, 2003-2004*

Figure 5.18 shows that the number of bathrooms and toilets in the sample range from four to eight. More than a third (31 per cent) of the dwellings had six bathrooms/ toilets. More than a quarter (26 per cent) had seven bathrooms/ toilets. 23 per cent of the mostly high-middle income dwellings even had eight bathrooms/ toilets. 12 per cent had five bathrooms/ toilets, while only 8 per cent of the dwellings had the minimum number of four bathrooms.

In middle-class homes, all master bedrooms and the majority of other bedrooms have their own bathrooms on an en-suite design basis. Guest reception rooms always come with their separate toilets as part of the guest zone in order to maintain privacy away from household living spaces. Similarly, the servant’s rooms in most homes are provided with bathrooms.



SIZE OF BATHROOMS/ TOILETS

Table 5.6 includes selected statistics on the size of bathrooms and toilets built by the study population. The data show that the arithmetic mean size of the bathrooms was 6.5 square metres. The median room size was smaller only by 0.6 metre at 5.9 square metres.

Table 5.6 The size of bathroom and toilet in square metres

	<i>Mean</i>	<i>Median</i>	<i>Minimum Standard</i>	<i>Index of Mean to Minimum Standard</i>
<i>Bathrooms</i>	6.5	5.9	2.8	2.30
<i>Toilets</i>	3.2	2.9	1.4	2.30

Source: fieldwork, 2003-2004

The data presented in table 5.6 also shows that the minimum standard size for bathroom is 2.8 square metres which means that the index of the actual mean size bathroom included in the sample is 2.3 times the minimum standard size for this type of rooms.

Furthermore, the same table includes basic descriptive data for the measurement of central tendency for toilet size. The mean size of actual toilet included in the sample is 3.2 square metres and the median is smaller by only 0.3 metre. Dubai Emirate’s minimum standard size for toilet is 1.4 square metres, as a result of this the index of the mean size to the minimum standard size is 2.3.



Figure 5.19 The size of bathrooms

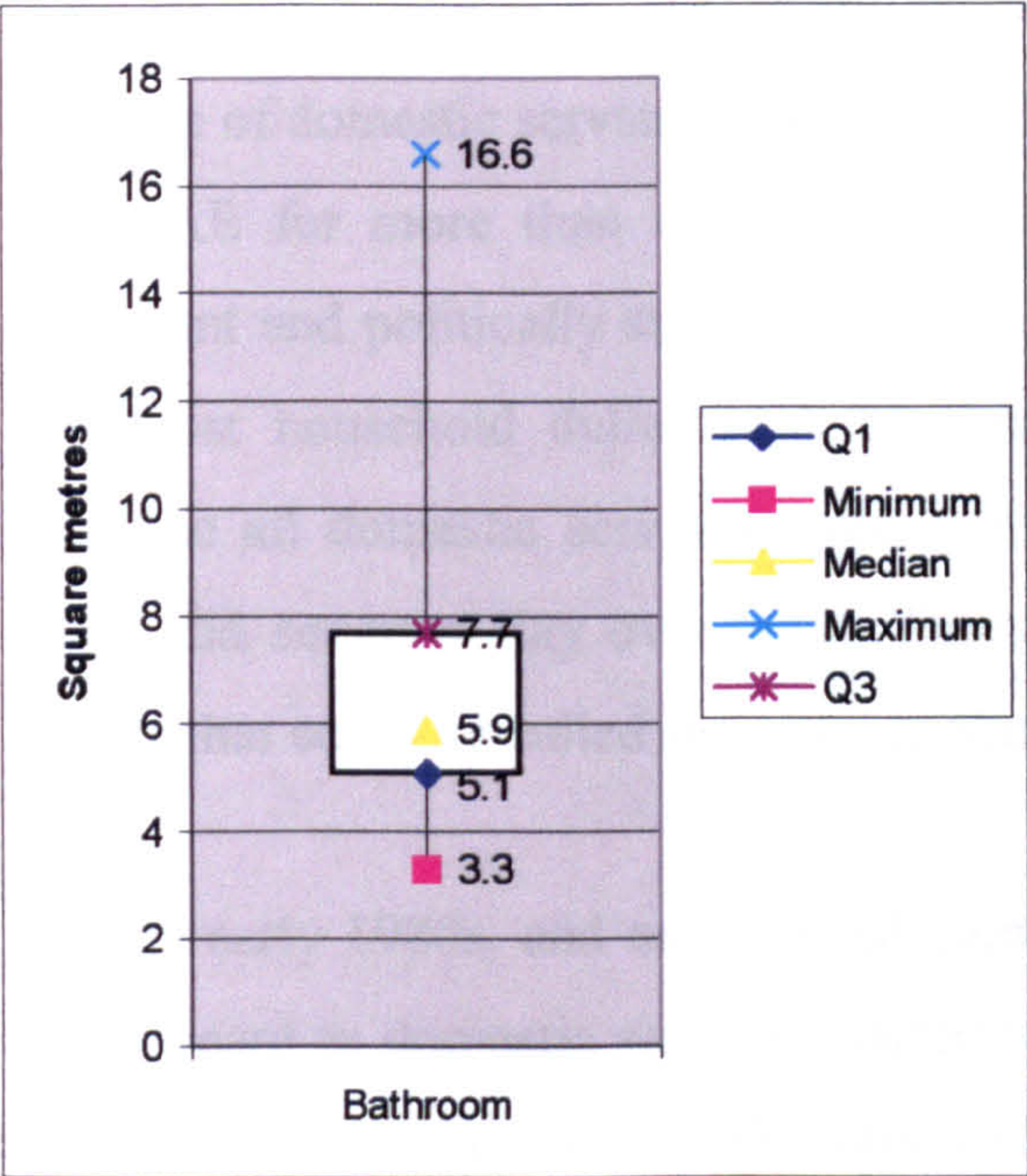


Figure 5.20 The size of toilets

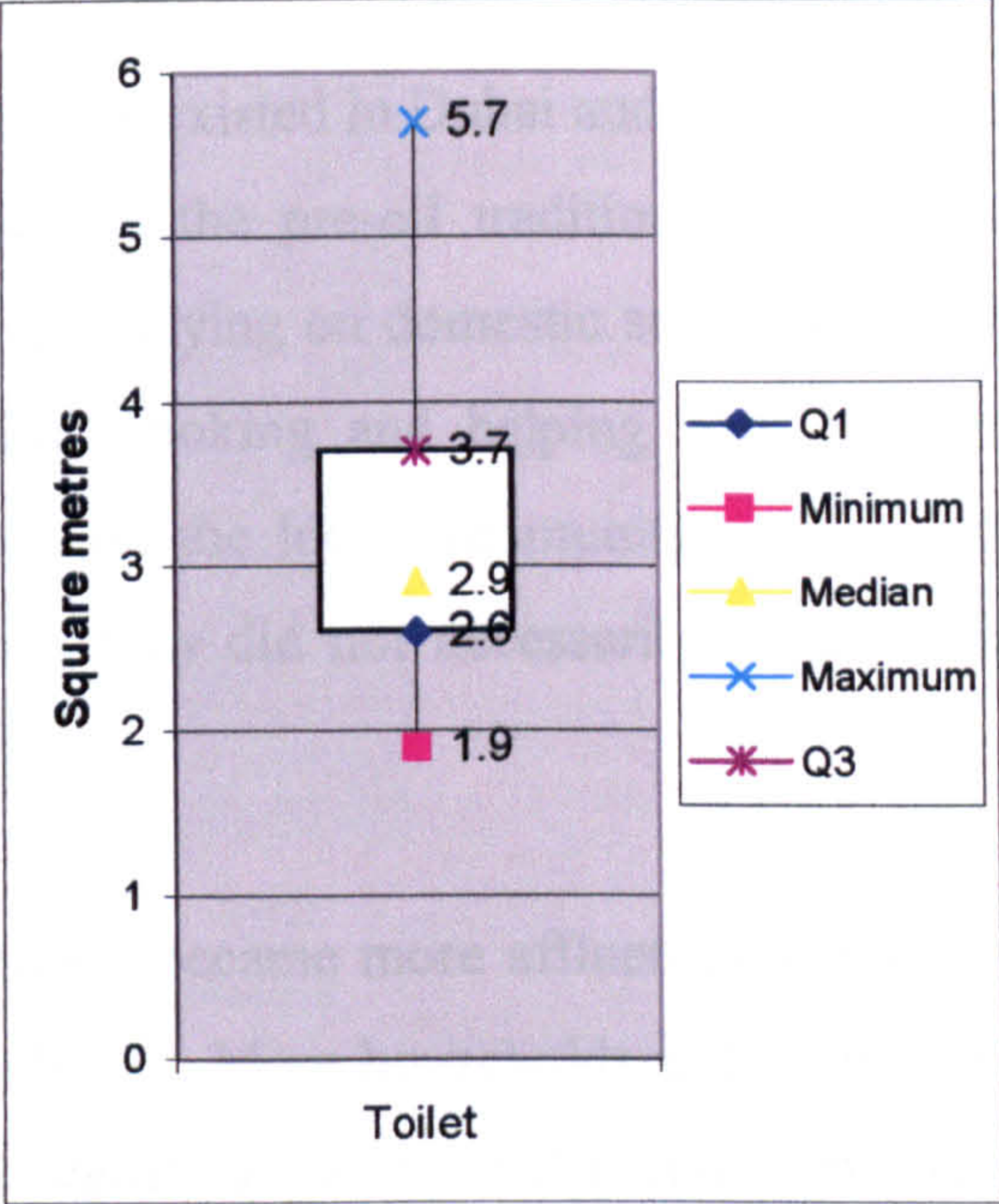


Figure 5.19 presents a five-number summary for the size of bathrooms. The smallest bathroom found in the sample was 3.3 square metres which is not much bigger than the minimum bathroom standard. First quartile size was 5.1 square metres with an index of only 1.82. The median value was 5.9 and located below the centre of the box. Third quartile value was recorded at 7.7 square metres with an index of 2.75. Our data on bathroom size had the maximum value of 16.6 square metres. Such large bathrooms are not very common, but they do exist in many higher middle-income villas, particularly in master bedrooms. The bathroom sample has a very high positive skewness value of 1.849 which shows that there are a lot more values above the mean.

Figure 5.20 includes a five-number summary for the size of toilets found in the study sample. The smallest toilet found in the sample was 1.9 square metres and the first quartile was 2.6 square metres with an index of 1.85 in relationship to the minimum standard. Medial value of toilets which is 2.9 has fallen below the centre of the box with an index value of 2.1. Third quartile score was 3.7 square metres and with an index of 2.6. The largest toilet size captured in the sample was 5.7 square metres. The toilet size sample has a relatively high positive skewness value of 0.883 which shows that there relatively more values above the mean score.



#### 5.3.4.6 NUMBER AND SIZE OF SERVANTS' ROOMS

The use of domestic servants is a practice that has existed in Dubai and other towns of the UAE for more than two hundred years. In the pre-oil traditional society, all merchant and politically superior families were relying on domestic servants to carry out most household duties such as cleaning, cooking and helping with children. Because all domestic servants were from within the local community, only in rare cases did servants stay over-night. Therefore, they did not necessarily need special rooms that could be called servants' rooms<sup>76</sup>.

By the early 1980s, and as the local community became more affluent, the situation with regard to domestic servants started to change. More households and particularly from the newly formed middle-class were beginning to seek help from servants to look after their daily household needs. As demand for servants dramatically increased, there was a severe shortage of this kind of labour in the local labour market. As a result, female expatriate house maids from countries such as Egypt, India, Sri-Lanka, Philippines, Indonesia and more recently, Ethiopia were brought in under short-term contracts<sup>77</sup> to help with household duties. This has meant that, unlike the traditional periods, house maids must now have their own space as they are expected to stay in the house on more permanent bases.

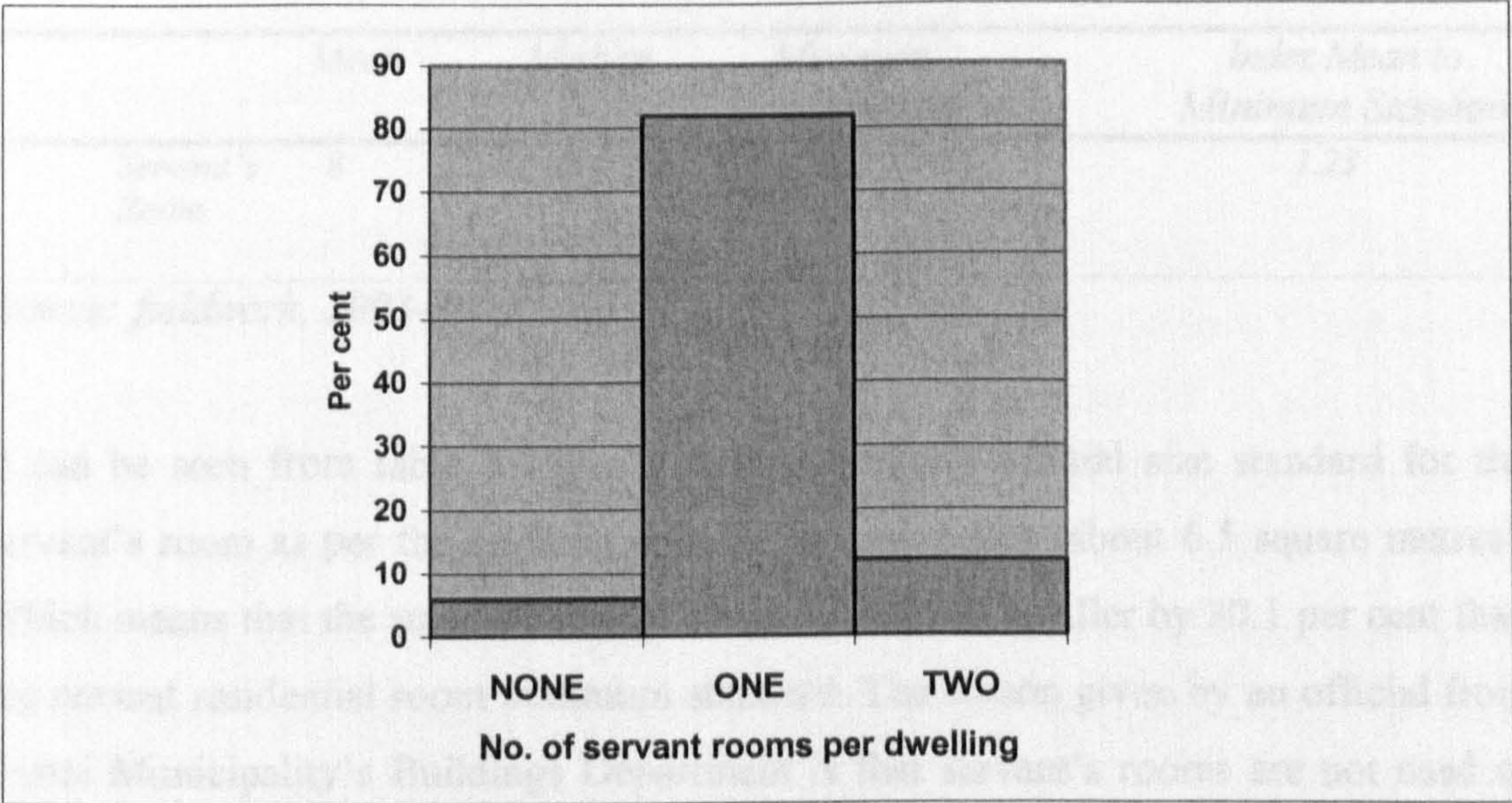
---

<sup>76</sup> There were, however, a few cases where servants stayed permanently in the house and had their own rooms which were kept in the back of the house.

<sup>77</sup> House-maid contracts normally run for two years and are open to renewal. There are cases where the households had the same maids for many years, sometimes exceeding ten.



Figure 5.21 Distribution of number of servant’s rooms



Source: fieldwork, 2003-2004

As shown in figure 5.21, only six per cent of the study households did not have a special room for servants at the time when the survey was conducted. This shows that this type of room has become an essential spatial element in the homes of middle-class Dubaians. The figure also shows that an overwhelming majority of 82 per cent had one room designated for the use of the maids. Finally, our survey also revealed that 12 percent of the middle-class population had two rooms that were dedicated for the use of servants. Two maid rooms were mostly found in the homes of mid-middle and high-middle groups. In most cases two rooms were built because the households had female maids and male cooks or family chauffeurs and their rooms needed to be separated.

SIZE OF SERVANTS’ ROOMS

Table 7 shows that the arithmetic mean for the size of servant’s room was 8 square metres, while the median for the same room was 7.4 square metres. This clearly shows that this type of rooms is by and large the smallest of all habitable rooms in the middle-class homes.



Table 5.7 The size of servant’s room in square metres

	Mean	Median	Minimum Standard	Index Mean to Minimum Standard
Servant’s Room	8	7.4	6.5	1.23

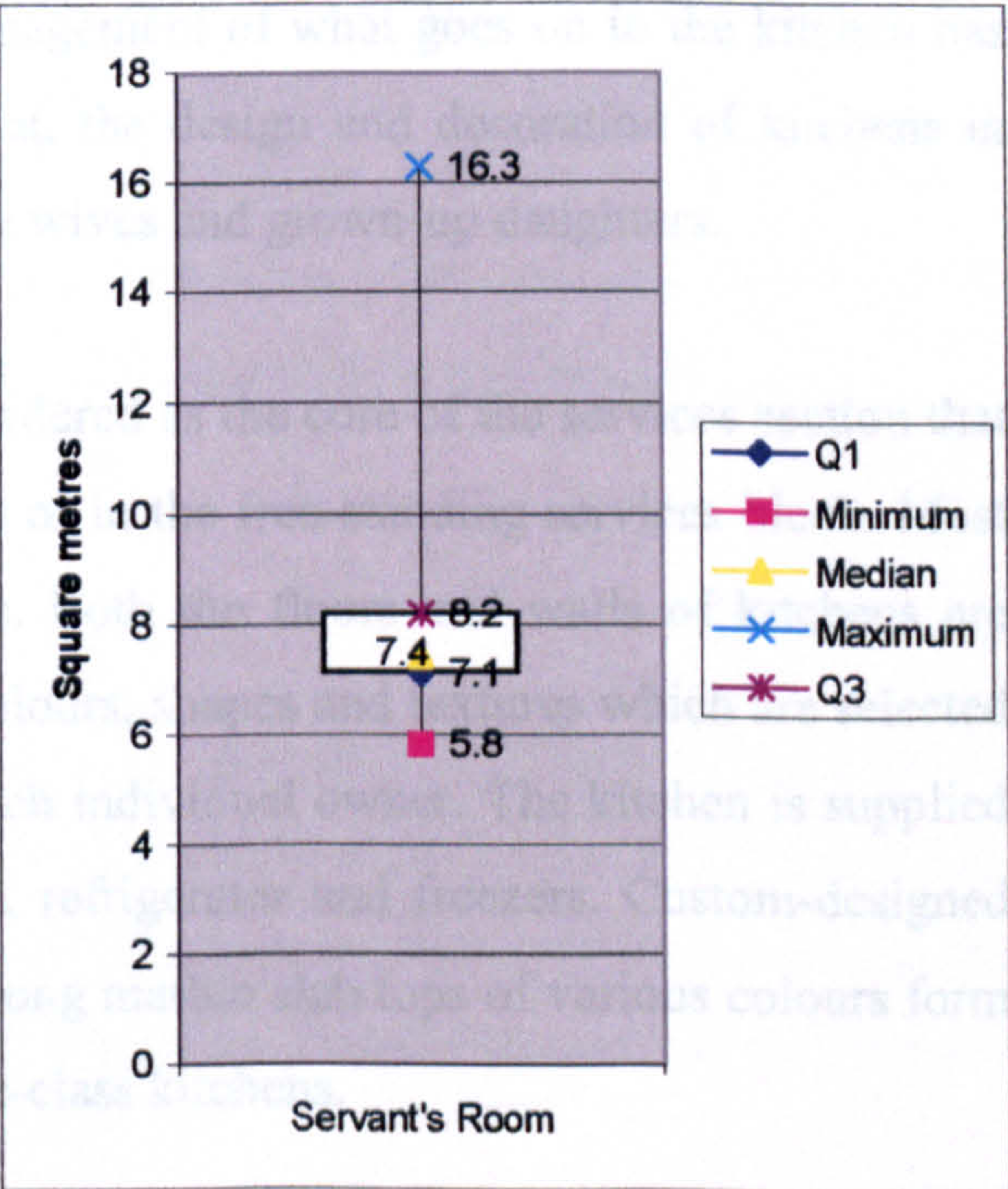
Source: fieldwork, 2003-2004

It can be seen from table 5.7 also that the minimum official size standard for the servant’s room as per the building code is 70 square feet (about 6.5 square metres). Which means that the standard for the servant’s room is smaller by 30.1 per cent than the normal residential room minimum standard. The reason given by an official from Dubai Municipality’s Buildings Department is that servant’s rooms are not used or occupied for most parts of the day, as maids are expected to be working in the various sections of the home.

Our analysis of room size shows that the index for the mean of servant’s room size to the minimum standard is 1.23. This clearly shows that most servant’s rooms are built at around the minimum standard. In simple terms, this shows that the size of this room is the least important from the household’s perspective and, therefore, it is kept as small as possible and without any decoration.

Figure 5.22 The size of servant’s rooms

Figure 5.22 shows the five-number summary for the size of servant’s room. In our sample the minimum room size found was 5.8 square metres which is way below the minimum standard. Although the building permit committee does not pass such substandard room size, some of my informants within the private consultancy firms have said that a few homeowners keep the room





size below the standard and ask for the name of the room to be changed on the submitted drawings to, for instance, store, exercise room or any other name just to get the drawings approved.

The figure also shows that the median room size found in this sample was 7.4 square metres which is only bigger by 0.9 metre than the minimum standard. Third quartile value was 8.2 square metres, with an index of 1.26 compared to the minimum standard. Finally, the maximum room size captured in the sample was 16.3 square metres, at slightly more than double the median value of this type of rooms. The sample has shown a very high negative skewness value of (-2.601) indicating that the sample has a lot more cases that are clustered below the arithmetic mean than above it.

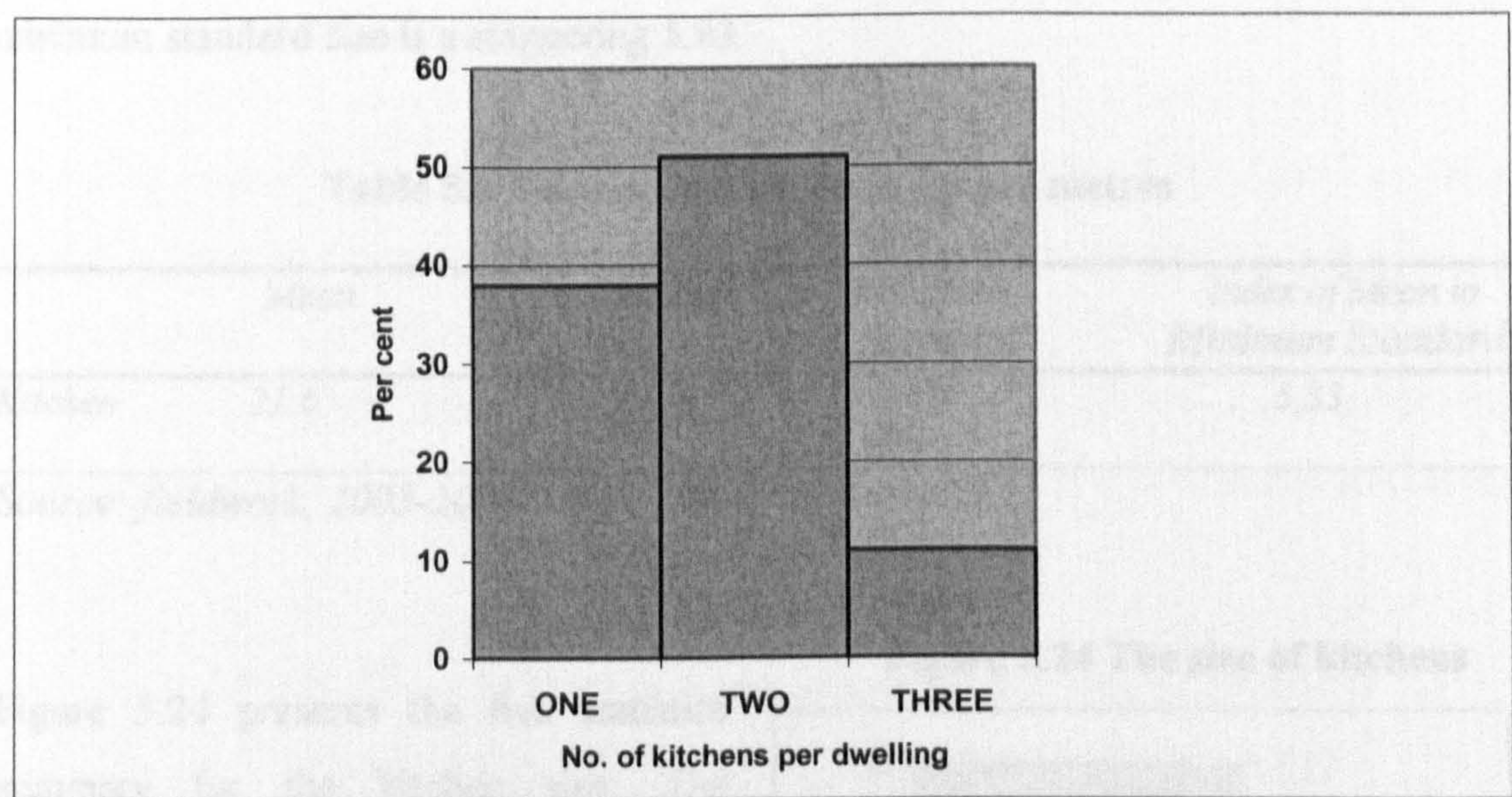
#### 5.3.4.7 NUMBER AND SIZE OF KITCHENS

The kitchen is a domestic space that has existed in virtually all types of homes found in the UAE throughout its past history. Locally, the kitchen is known as *matbakh* which literally means the place where cooking takes place. Because, conventionally, preparation and serving of meals were the responsibility of the wives and grown-up female members of the households, they were attached to the kitchen and put in charge of its overall management. Today, however, with the heavy reliance on housemaids, the role of wives in the daily management of what goes on in the kitchen has diminished to a large extent. Despite that, the design and decoration of kitchens in middle-class homes are left entirely to the wives and grown-up daughters.

Kitchens of middle-class homes are considered as the core of the services section that is either located at the back of the house or in the free-standing services block. Most kitchen layouts are rectangular in shape. Both the floors and walls of kitchens are covered with ceramic tiles of different colours, shapes and textures which are selected and matched according to the taste of each individual owner. The kitchen is supplied with expensive gas and electric cookers, refrigerator and freezers. Custom-designed floor and wall-mounted cupboards with long marble slab tops of various colours form the most basic furnishing items of middle-class kitchens.



**Figure 5.23 Distribution of number of kitchens per dwelling units**



*Source: fieldwork, 2003-2004*

As shown in figure 5.23, number of kitchens in the sample population run between one and three kitchens per household. More than a third (i.e. 38 per cent) had only one kitchen within their dwelling units. About half (51 per cent) of the households had two kitchens available to them in the same dwelling unit. The two kitchens were either two full-sized kitchens or one major kitchen in the service block and another kitchenette inside the main villa. The survey has also shown that 11 per cent of the population had three kitchens in one dwelling unit.

In such cases, the household had one kitchen in the service block, one in the ground floor of the villa and a third kitchenette in the upper floor. Only the first kitchen that is located in the services block is used for daily cooking. Most two and three kitchens homes were those belonging to mid-middle and high-middle households.

**SIZE OF KITCHENS**

Table 5.8 presents a statistical summary of the size of the kitchen included in the study sample. Analysis has shown that the arithmetic mean of the sample was 21.6 square metres, while the median size was 20.8 square, smaller only by 0.8 metre. The official minimum standard size for a kitchen in the Dubai Emirate building code is



only 3.7 square metres. This means that the index of the mean kitchen size to the minimum standard size is a staggering 5.83.

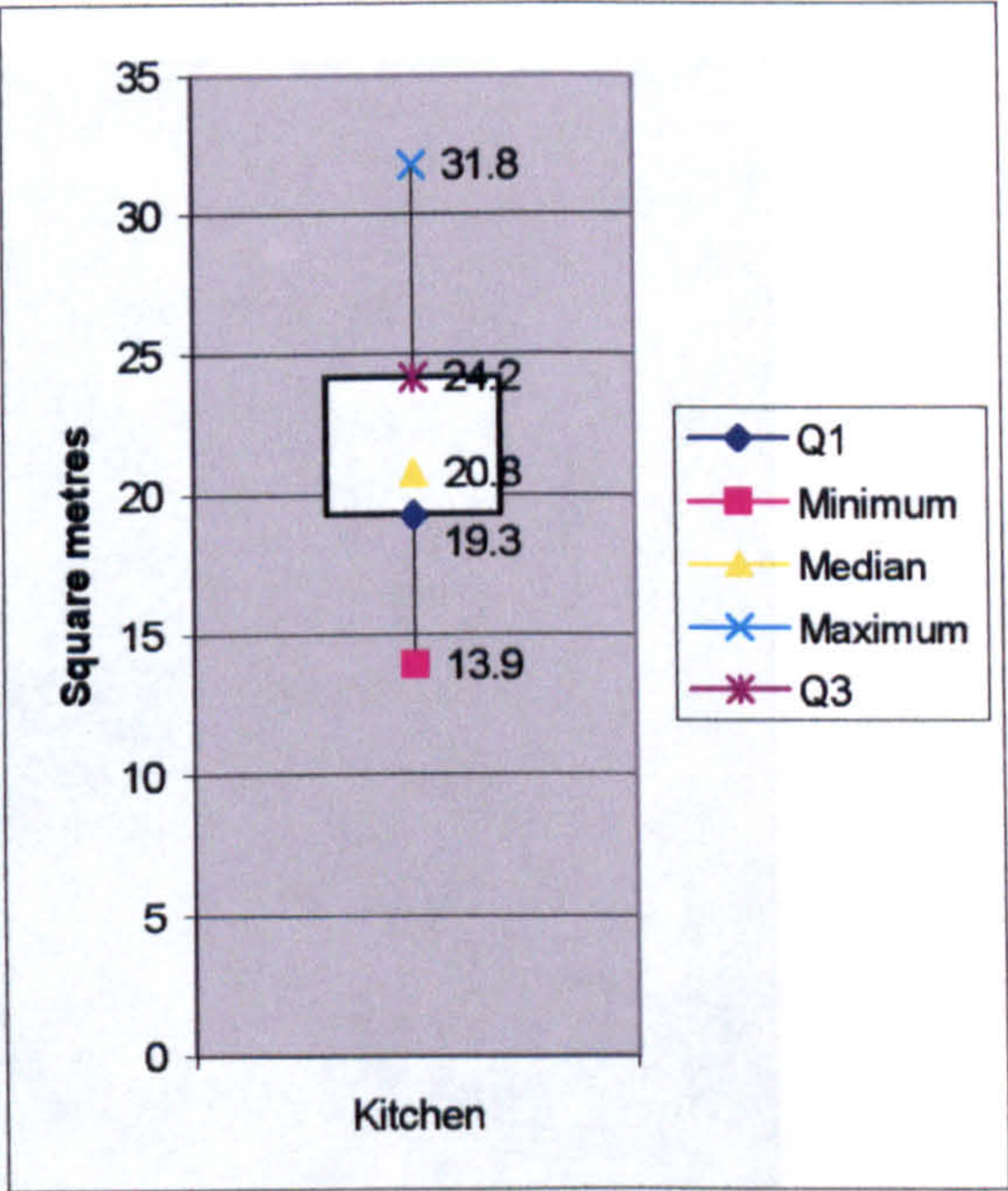
Table 5.8 The size of kitchen in square metres

	Mean	Median	Minimum Standard	Index of Mean to Minimum Standard
Kitchen	21.6	20.8	3.7	5.83

Source: fieldwork, 2003-2004

Figure 5.24 presents the five statistics summary for the kitchen size. The smallest size kitchen found in our sample was 13.9 square metres, with an index of 3.76 compared to the minimum standard. The median score which was 20.8 square metres is located slightly below the centre of the box. Third quartile score was found at 24.2 square metres and with an index of 6.54 in relationship to the minimum standard. The largest value found in this sample was bigger than the median score by around 45 per cent at 31.8 square metres. The sample has shown a relatively high positive skewness value of 0.711, indicating that the population has a larger number of values above the mean.

Figure 5.24 The size of kitchens



5.3.4.8 OTHER ROOMS

In addition to the aforementioned domestic housing spaces (i.e., bedrooms, living rooms, dining rooms, male and female guest reception rooms, kitchens, servant’s rooms, bathrooms and toilets), contemporary middle-class dwellings also contain a variety of other rooms. These rooms are normally directly integrated into the main living areas or linked through internal or external doors. Therefore, they



host of other new and highly specialised domestic spaces that did not exist in previous periods and have now become very common.

*Dressing rooms* are for instance found in about 95 per cent of the dwellings. Most bedrooms are now designed with their individual walk-in dressing rooms that are relatively very large. The average size dressing room found in the middle-class homes is five square metres. The walk-in dressing rooms are almost always equipped with two metre high wooden wardrobes of multiple doors, shelves, drawers and clothes rails.

**Plate 5.5 An interior of a dressing room in a master bedroom**



*Source: Fieldwork: 2003-2004*

Children's playing rooms are also being built quite frequently in contemporary middle-class dwelling units. This type of room is built for the purpose of providing an enclosed indoor space for the leisure of children. The Space is also used as a place for storing toys and playing games of different sizes that are needed to be kept indoor. Playing rooms are normally found upstairs and adjacent to the children's bedrooms.

A little more than one quarter (26 per cent) of dwelling units had one room that was delineated as *sitting / reading rooms*. Those rooms are normally directly integrated into the master bedroom or linked through internal or external doors. Therefore, they



are meant to be primarily used by the parents. The sitting room is usually designed as a cozy nook that is furnished with classical style sofa pieces and is intended to be used for the relaxation of the couple. Households who have cultural, intellectual or academic interests use the room for displaying books and as a reading space.

93 per cent of households included in the survey had one *utility room*. This kind of room is where clothes are washed using washing machines and dryers. Before utility rooms were known, households used to place the washing machines in one of the bathrooms or under an outdoor shed in the front-yard. Furthermore, a few households (7 per cent) had built a small room next to the utilities' room specifically for the purpose of ironing the clothes after washing is finished. Both utilities' room and ironing room are located in the services zone of the housing units.

All households included in the survey had at least one *storage room* that is used for storing dried and canned food<sup>78</sup>. Functionally, the store is closely associated with the kitchen and therefore, those two spaces are normally built close to each other in the services zone. The average size of the store room is about 5.8 square metres. In addition to storing food, the store is also used for shelving various household gadgets and tools.

Some middle-class homes include less common types of rooms such as physical exercise room (mini gym), computer and internet room, hobby<sup>79</sup> room home theatre room and female beauty-room<sup>80</sup>. Those types of rooms are rare and are only found in a relatively small proportion of mid-middle or high-middle income households.

---

<sup>78</sup> National households in Dubai and the rest of UAE usually purchase their monthly or bi-monthly supply of rice, sugar and flour in large (i.e. 30 to 50 k.g.) sacks. They also buy large boxes of canned food that last over an extended period of time.

<sup>79</sup> For instance in my survey I found in one household a purpose-built photography studio room (*dark room*). The owner of the dwelling unit was using the room to merely practice and satisfy his personal hobby.

<sup>80</sup> For privacy and convenience reasons some local women prefer to bring beauticians into their homes rather than going to beauty saloons and some middle-income households have designated a special room for this purpose.



Figure 5.25 A cartoon from a local newspaper



Alemarat Alyoum, 1/1/2007

5.3.5 SUMMARY OF DWELLING UNIT SIZE AND RATES OF SPACE CONSUMPTION PER INCOME STRATA

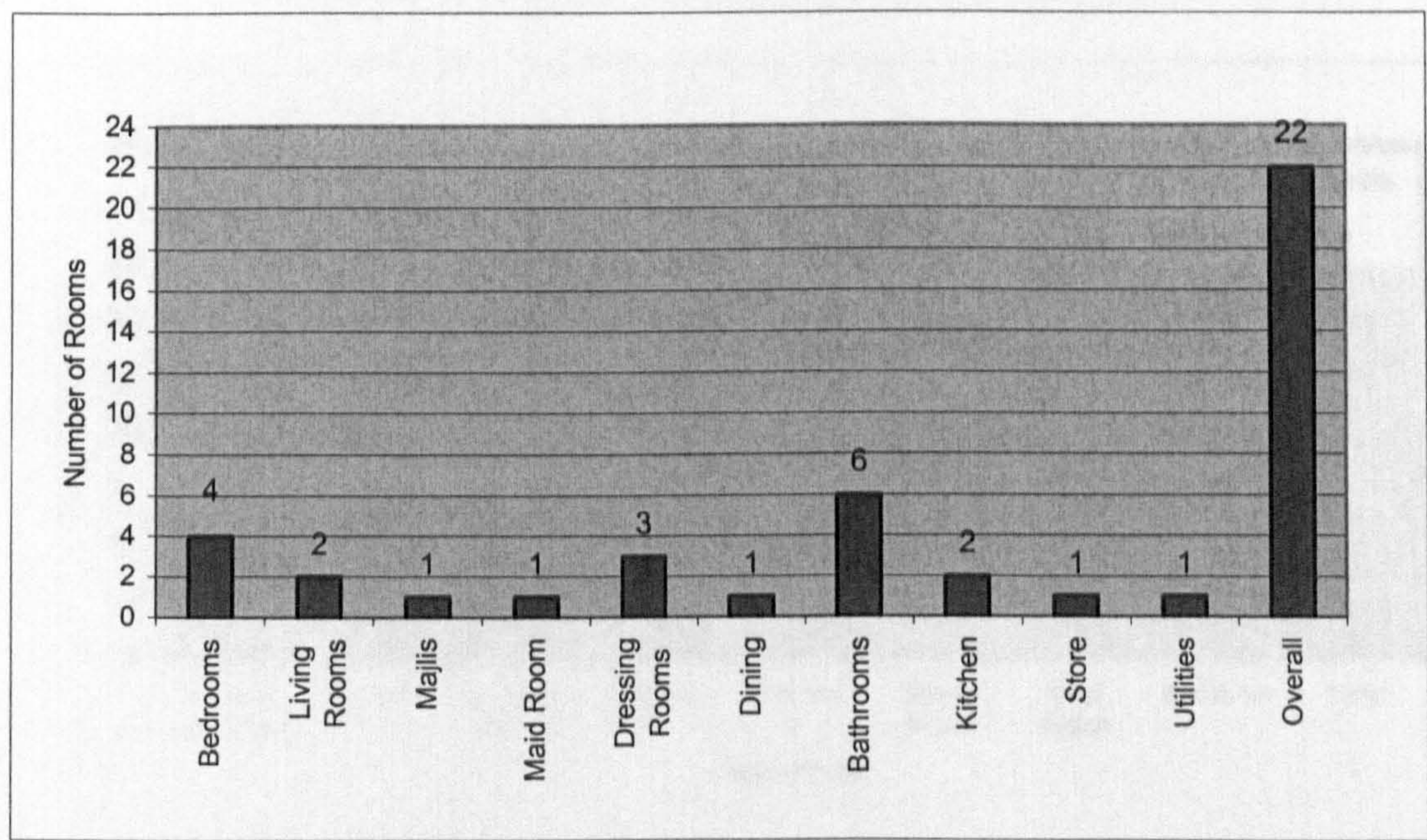
The preceded discussions have highlighted in a considerable detail the most common domestic spatial patterns of the contemporary middle-class homes in Dubai Emirate. The discussion also included detailed assessment of the domestic spaces both in terms of number and size of each individual type of space found in middle-class dwellings covered in the survey.

The review and analysis of the spaces within the study population have revealed a number of unique characteristics. **First** and foremost, the dwelling units include an *exceptionally large number of rooms*. As shown in figure 5.25, the median of total number of rooms<sup>81</sup> in a typical middle-class dwelling is 22. However, There are instances where the number of rooms in a dwelling reached as high as 25.

<sup>81</sup> Include all rooms intended for residential purposes. Corridors, hallways, lobbies, verandahs, balconies are not included.



Figure 5.26 The median number of rooms in middle-class dwelling units



Source: fieldwork, 2003-2004

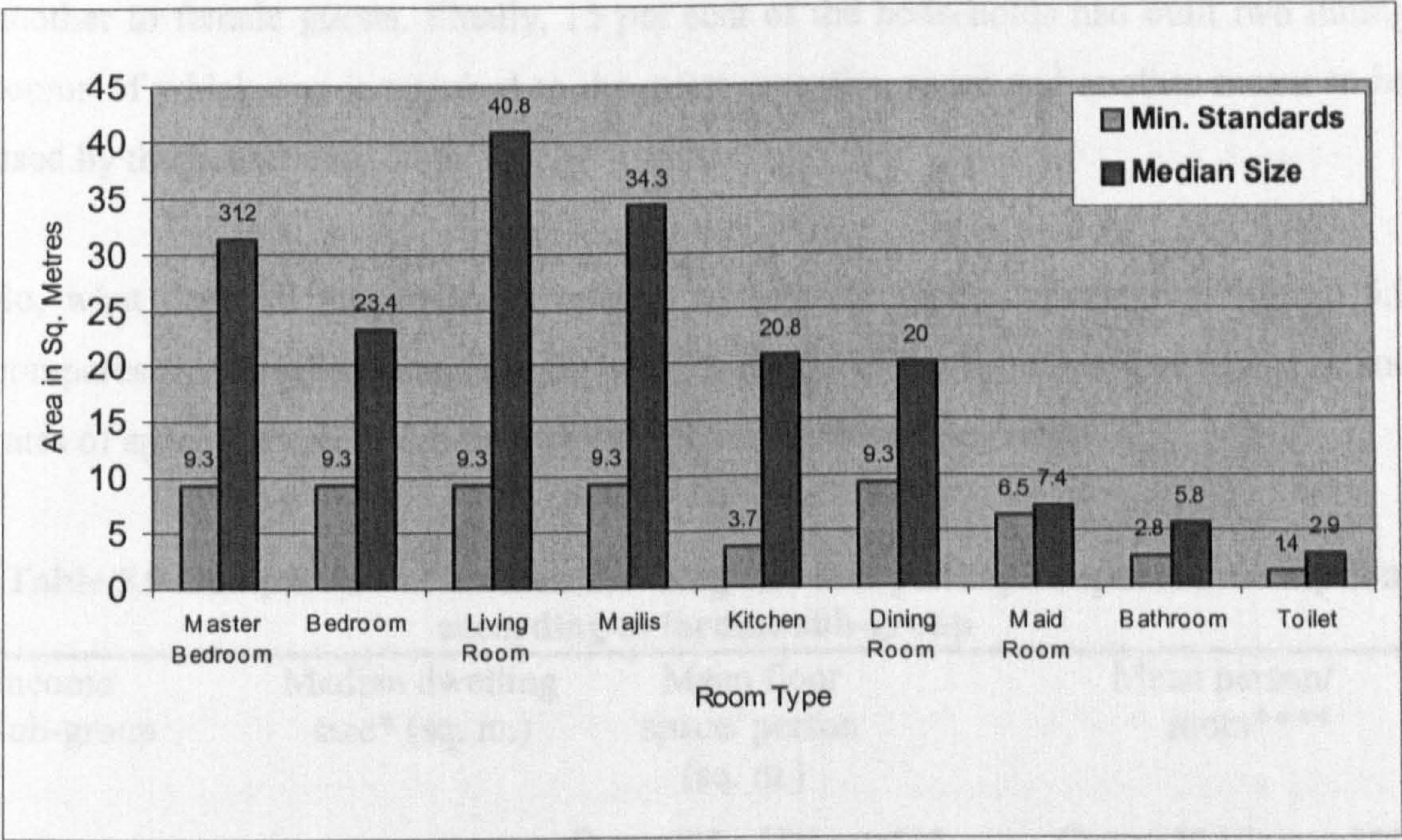
The data shows that the habitable rooms which include bedrooms, living rooms, guest reception room, dining room and servant’s room account for much less than half of the rooms at 40.9 per cent of all domestic spaces. On the other hand, non-habitable rooms such as dressing rooms, bathrooms, kitchens, storage rooms and utilities room make up the remaining 59.1 per cent of the overall number of spaces.

Bedrooms alone constitute only 18.2 per cent of the total number of spaces. Number of bathrooms/ toilets account for more than one quarter of all spaces (27.3 per cent). On the average, there is one bathroom per every 1.5 habitable room. The overall number of rooms in the guest zone which include the majlis, dining room and toilet add up to around 13.6 per cent of total number of rooms in middle-class homes.

**Second,** The rooms and spaces in the middle-class dwellings are *extremely large* compared to sizes of rooms in the previous periods as well as the current adequate minimum official room size standards determined by the Dubai Emirate building code. Our detailed analysis of room sizes has shown that, in general, the median size of habitable rooms is 3.24 times the minimum standards, while in the non-habitable rooms the median room size is 3.5 times the minimum standards.



**Figure 5.27 Comparison between the minimum room size standards and median of actual room sizes for middle-class housing units**



Source: fieldwork, 2003-2004

Figure 5.26 presents a comparative summary of the medians of actual room sizes and the minimum room size standards by type of rooms. The habitable portions of contemporary dwellings take up around three quarters (i.e. 75.7 per cent) of the net area dedicated to rooms<sup>82</sup>, compared to only 24.3 per cent for the non-habitable rooms. One third (31.5 per cent) of the net area of rooms is committed to bedrooms and nearly one quarter (24.5 per cent) of the built-up room spaces goes into living rooms. The entire guest zone consumes 18.3 per cent of the built-up room areas. Bathrooms and toilets take-up 11 per cent of the net room floor space, while the kitchens absorb 13.3 per cent of the useable floor-area committed to room spaces. The servant's room is given the least of the room floor-space with only 2.5 per cent.

**Third**, it can also be noted from the data on the domestic spaces within middle-class households that there is a considerable amount of *duplication* in a number of general and common household spaces. For instance, 54 per cent of dwelling units have two living rooms and another 16 per cent even have three living/ family rooms. Our data has also shown that 51 per cent of households had built two kitchens in their villas

<sup>82</sup> Areas dedicated to corridors, lobbies, balconies, verandas and hallways are not included as part of room spaces.



while 11 per cent had three kitchens/ kitchenettes. 27 per cent of dwelling units included in the study have two guest reception rooms, one assigned to male and another to female guests. Finally, 15 per cent of the households had built two dining rooms of which one is attached to the guest reception room and another meant to be used by the household.

So, what does all this mean in relation to housing space consumption? Table 5.9 compares the three income sub groups with regard to their median dwelling size and rates of space per capita and their relevant housing occupancy rates.

**Table 5.9 Comparison of median dwelling size and per capita space consumption according to income sub-group**

Income sub-group	Median dwelling size* (sq. m.)	Mean floor space/ person (sq. m.)		Mean person/ room****	
		Current**	Ultimate***	Current**	Ultimate***
Low-Mid.	390	79.6	62.9	0.6	0.7
Mid-Mid.	446	91.0	71.9	0.5	0.6
High-Mid.	492	100.4	79.3	0.3	0.4

Source: Fieldwork, 2003-2004

\* The median dwelling size is defined as the useable floor area of both habitable and non-habitable rooms in addition to corridors, lobbies etc.  
\*\* Based on a mean household size of 4.9 of the sample.  
\*\*\* Based on a mean household size of 6.2 of the Dubai Municipality.  
\*\*\*\* Based on number of persons per habitable rooms only (i.e. bedrooms, living rooms, guest reception rooms, dining rooms, etc.), servant's rooms are not included.

The data show a considerable difference in the sizes of median dwelling units and, thus, the amount of domestic space consumed by each of the three income sub-groups. With the median size of dwelling units of 390 square metres, the low-middle group has the smallest dwellings in the study population. Such dwelling size means that the share of each household member in the immediate term is around 79.6 square metres (with 4.9 persons per household). The per capita amount of domestic space is anticipated to be lowered to 62.9 square metres by the time the households reach their expected normal maturity of 6.2 persons per household, if additional spaces are not built in the same dwelling units. Furthermore, in the immediate term, the low-middle



income sub-group has an occupancy rate of 0.6 person per habitable room and it is anticipated to increase slightly to 0.7 person per room once the households have reached their full normal sizes.

The second study population group, which is the largest, is the mid-middle which has a median dwelling unit size of 446 square metres. This group consumes 56 square metres (14.3 per cent higher) more domestic housing space than the low-middle group. Current rates of per capita space consumption shows that each household member has a share of 91 square metres. Those rate may drop by 26.6 per cent, i.e., to 71.9 square metres at the time when households reach their normal average size. The mid-middle income group also has a lower occupancy rate than that of the low-middle group. Current rates of occupancy have shown only 0.5 person per room, i.e., that on the average there are two habitable rooms for each individual household member. In the longer term and even when the households reach their full size, there will only be 0.6 person per room.

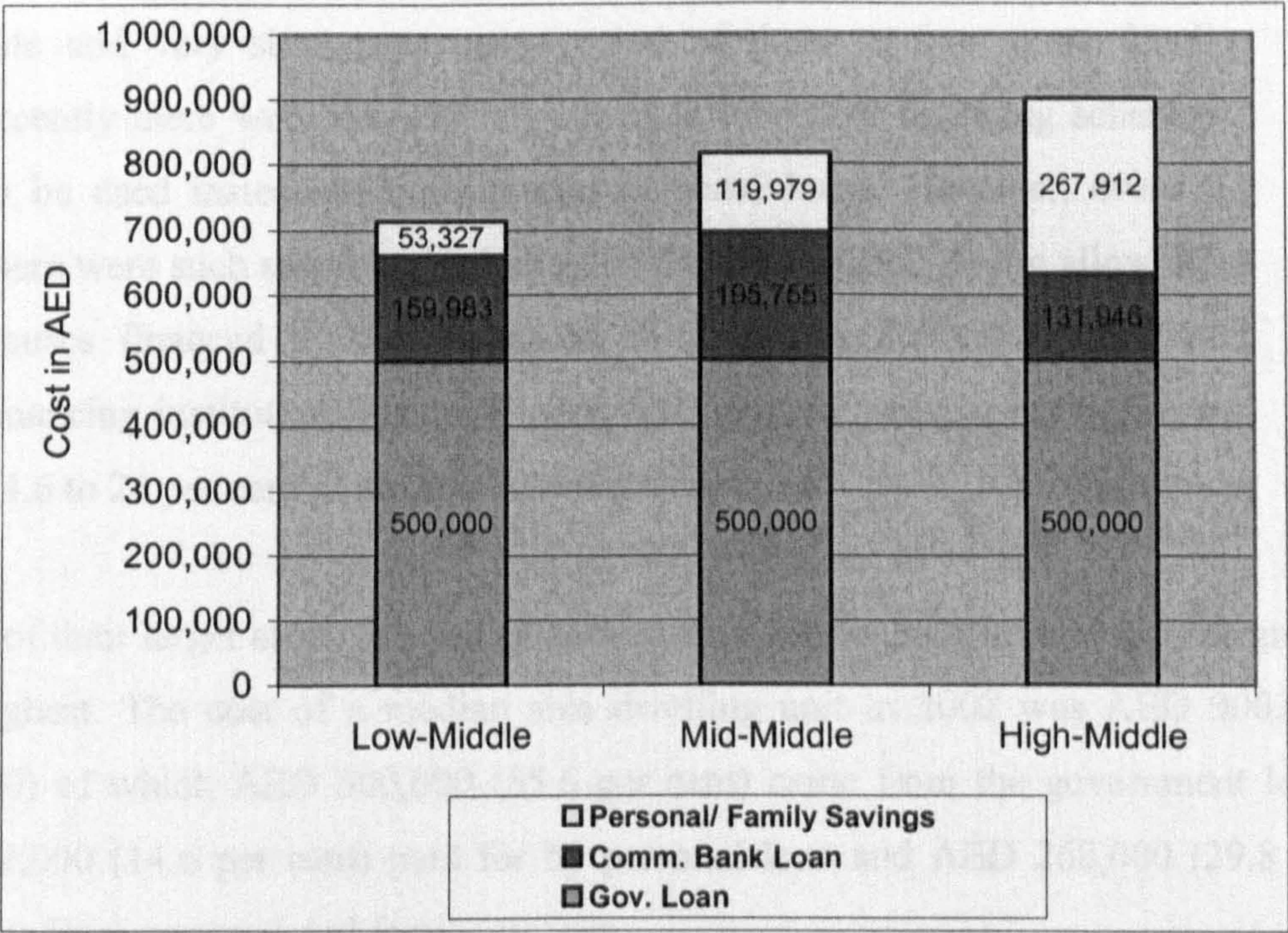
The high-middle income group has the largest median dwelling unit size at 492 square metres. Median dwelling size in this group is larger by 102 square metres than the low-middle group and by 46 square metres to the mid-middle households. Therefore, the housing consumption rates in the high-middle income population are by far the highest. In the immediate term, every member in the households consumes an average of 100.4 square metres and perhaps once the household sizes reach their normal average size of 6.2, the per capita space consumption may reach 79.3 square metres. The occupancy rate for the high-middle households is extremely low at only 0.3 person per room and this may only increase to 0.4 person per room once they reach their average size of 6.2 persons per household.

## 5.6 SOURCES OF CONSTRUCTION FINANCE

Figure 5.27 shows the median cost of dwelling units and sources of house construction finance for each individual income subgroups according 2002 prices. The costs do not include consultancy fees which are normally between two and five per cent of the total cost of construction depending on each individual consultancy agreement.



**Figure 5.28 Sources of dwelling unit construction finance by income subgroup for year 2002.**



Source: fieldwork, 2003-2004

Our findings have shown that, in general, the median costs of construction per square metre for the three income subgroups were identical which suggests that there are no major differences in the type and quality of the finishing materials applied in the construction of their homes. The data also show that all of the three study groups have financed the construction of their dwelling units using three major sources of finance which are;

- (1) *interest-free government housing loans*: which comprises a fixed amount of AED 500,000 provided by the PHFS and the SZHP to all households regardless of their income or other socioeconomic status. In 2002, the government loan covered between 55 to 70 per cent of the overall cost of construction.
- (2) *personal and family savings*: which includes money saved by the owner, his wife and sometimes help provided by close relatives such as parents, uncles or fathers-in-law. This type of financing covered between 7.5 and 30 per cent of the total cost of housing construction.



(3) *personal loans from commercial banks*: include personal loans taken from private commercial banks with between 6 and 9 per cent interest rate and very short repayment period of three to four years. Until recently there were no privately operated mortgage financing schemes to be used instead of high-interest personal loans. However, even if there were such schemes, both the PHFS and the SZHP do not allow the houses financed by their loans to be used as collateral by another financing institution. Personal loans from private banks cover between 14.6 to 24 per cent of the cost of construction.

Because of their larger sizes, the cost of construction for the high-middle income group is the highest. The cost of a median size dwelling unit in 2002 was AED 900,000 (\$245,000) of which AED 500,000 (55.6 per cent) came from the government loan, AED 132,000 (14.6 per cent) paid for by personal loan and AED 268,000 (29.8 per cent) came from personal and family savings.

The cost of a median size dwelling unit in the mid-middle group was AED 816,000 (\$222,271). AED 500,000 interest-free government loan covered 61.3 per cent of the cost. Personal loans paid AED 196,000 or 24 per cent and personal and family savings covered the remaining 120,000 which comes up to 15.7 per cent.

Low-middle income households had lower cost of construction compared to the other groups owing to smaller size dwellings. The cost of a median size housing unit was AED 713,000 (\$194,362). 70.1 per cent of the cost was covered by the government loan, 22.4 per cent (AED 160,000) was paid for by personal loan and only 7.5 per cent (AED 53,000) came from personal and family savings.

## 5.7 SUMMARY

This chapter has identified and analysed the socioeconomic characteristics and housing conditions of the target population. The findings indicate that the larger proportion of the study population is composed of those from the mid-middle segment with relatively smaller percentages of low and high-middle households. As expected the average household size of owner-occupants is larger with 4.9 persons per household



while the owners-to-be have an average size of 3.7. This is because in general the owners have more mature household life-cycles. Moreover, it has become obvious that middle-income households in Dubai are now highly dominated by nuclear-type households, whereas, only thirty years ago the extended-family arrangement was the dominating pattern. However, a new pattern of what is known as the quasi-extended family has emerged, in which two or more closely related households would live in fully separate dwellings that are adjacent to each other in order to provide social and family support system.

The majority of households within the middle-income segment of the population now live in rented accommodations for a number of years before they are granted the interest-free loans and able to live in their own dwellings. The number of years spent in rental accommodation is primarily determined by how long they have to wait for their loan. The latest average waiting period has reached up to nine years.

The cost of private middle-class dwelling construction has risen sharply within the last decade. The average cost of building a square metre rose from AED 1,076 in 1993 when the PHFS was initiated to AED 2,017 in 2005. Such increases which are caused mainly by the rising cost of building materials have made acquisition of private housing much more expensive.

Outcomes from the surveys have shown a substantial increase in the size of contemporary middle-class dwellings, both in terms of number of spaces and sizes of each room. The median number of spaces of all types reached 22 including both habitable and non-habitable rooms falling into three types of general functional categories; household zone, services zone and guest zone. On the other hand, sizes of individual rooms are considerably larger than the officially adopted minimum room size standard. Analysis has revealed that the median sizes of both habitable and non-habitable rooms are more than two and a half and many instances even three and a half times the minimum standard. There is also a noticeable degree of duplication in several types of specific rooms such as living rooms, kitchens, dining rooms and guest reception rooms. Massive increase in dwelling size and noticeable drop in the average household size have implied that middle-class households are now consuming much greater quantities of housing.



## **Chapter 6:**

# **FACTORS INFLUENCING INCREASE IN DWELLING UNIT SIZES AND HOUSING CONSUMPTION AMONG MIDDLE-CLASS HOUSEHOLDS**



## 6.1 INTRODUCTION

So far the discussion has focused on outlining the important aspects of the housing policy in Dubai Emirate and the historical transformation of the housing conditions of the middle-class segment of the national population within the past forty years. Discussion has also clearly demonstrated that, while households have become much smaller, dwelling unit sizes have increased by more than threefold, allowing an unprecedented and significant rise in the per capita consumption of housing space.

Moving a step forward, this chapter intends to explore and highlight some of the most important factors that have contributed to the huge and sustained increase in the size of the contemporary middle-class dwellings. The discussion draws on both primary data obtained from the surveys and fieldwork investigations conducted by gauging the preferences, attitudes and roles of the key stakeholders (i.e. homeowners, owners-to-be, design consultants and the housing financing institutions, etc.) and secondary data compiled and analysed in support of the raised issues and arguments.

## 6.2 THE ROLE OF SUBSIDIES

To reiterate from an earlier discussion, in 1993, the Dubai local government instigated the Private Housing Financing Scheme (PHFS) with the mission of providing interest-free housing loan to middle-class national households in Dubai Emirate. Until recently the scheme has paid 5,382 persons AED 500,000 each, regardless of their varying socioeconomic characteristics or housing needs. Later in 1999, the UAE federal government also initiated a similar programme by setting up the Sheikh Zayed Housing Programme (SZHP) which also provides AED 500,000 in interest-free loans to middle class households throughout the UAE including the Emirate of Dubai. The SZHP has so far managed to allocate 1249 loans. By the end of the first quarter of 2005 there were some 14,746 applicants on middle-income housing loan waiting list. As indicated earlier, the waiting list is increasing at much higher rates than the number of loans being granted (Albayan, 21/9/2005). This situation has emerged because of inadequate funding from the government and the rapid increase in household formation

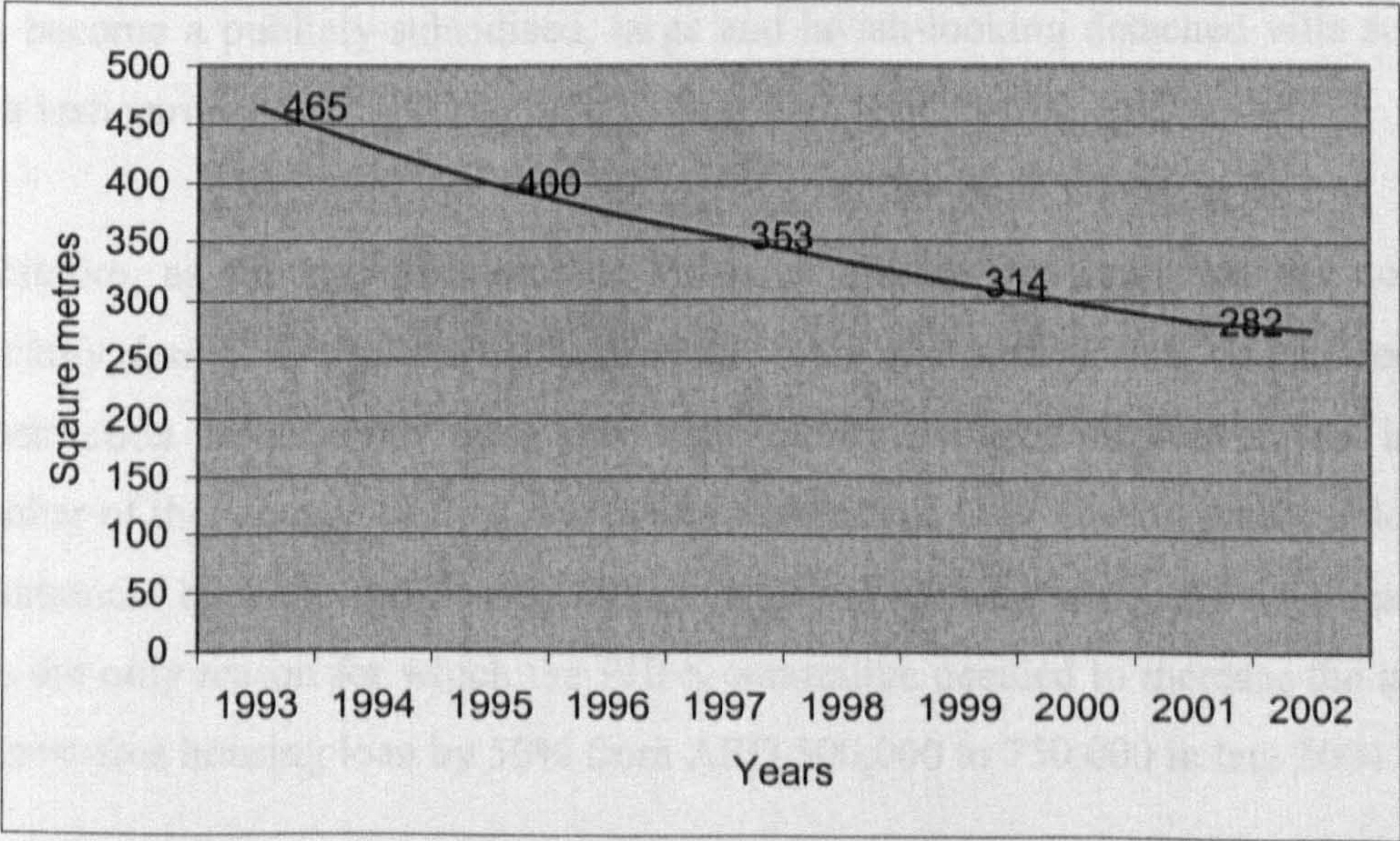


fueled by the presence of a relatively young population and financial support from the Marriage Funds since 1993 to encourage nationals to establish new households.

In addition to home construction interest-free loans, the local government has also allocated more than 21,000 large and fully serviced free residential plots to nationals in the period between years 1990 to 2002 for the purpose of facilitating access to owner-occupied housing for all middle-class. The estimated average cost of each plot to government budget in year 2000 was AED 300,000.

According to official government documents and media releases, the aim of the above initiatives is to assist all middle-class nationals who cannot house themselves to secure adequate dwelling units for themselves and household members. In their mandates, both the PHFS and the SZHP have assumed that all middle-class individuals are unable to house themselves under current circumstances and that all applicants require similar type of housing assistance under a blanket assumption that all households have similar housing needs and aspirations. Moreover, household needs of housing space, quality and services have never been clearly defined by any of the two main loan providing institutions.

**Figure 6.1 The approximate number of square metres of middle-class dwellings that could be built with only the AED 500,000 interest-free housing loan (1993-2002)**



Source: fieldwork, 2003-2004



Figure 6.1 shows the historical trend for the approximate amount of built-up housing space (in square metres) that could be built with AED 500,000 (i.e. the total amount of government loan) in view of the past trends in the cost of construction. The data shows that in 1993, the year when the programme started, beneficiaries from the loan could build as much as 465 square metres without having to add any additional financing. By 1998, the size dropped to 353 square metres and finally in 2002, the size dropped again to 282 square metres. Despite the increase in the cost of construction, the overall median size of dwellings built by the loan beneficiaries of the three income sub-groups remained as high as those built at the time when the loan programme was initiated.

The introduction of AED 500,000 by the PHFS in 1993 was instrumental in enabling the middle-class households to build and live in dwellings that were about double the size of the homes built earlier in the transition period (i.e. until the end of 1980s) and of much higher physical quality. As more loans were allocated and much larger dwellings were beginning to be built and used by their new middle-class owners, modern and considerably higher housing norms and standards were being established and adopted by the middle-class nationals. New norms fueled by generous government subsidies have created new and heightened aspirations and expectations among most households who started to realize that their relatives, friends, colleagues and neighbours are building much larger and more ostentatious homes than they had in the past. Thus, the typical image of an ideal family home in the minds of most households has become a publicly subsidised, large and lavish-looking detached villa surrounded by a lush garden.

Therefore, as the gap between the value of interest-free loan and the cost of the '*socially desired house*' started to increase, more and more households started to draw construction funds from their own and family savings. Moreover, an increasing number of them began to take substantial amounts of high-interest personal loans from commercial banks to supplement the government housing loans. As noted earlier, this was the only reason for which the PHFS committee decided to increase the size of the interest-free housing loan by 50% from AED 500,000 to 750,000 in late 2004.

To draw a picture of the effect of the government's AED 500,000 interest-free housing loan on the general sizes of dwellings built by the study population, each respondent of



both groups (i.e., owners and owners-to-be) were asked about the size of dwelling units they would have built if the government did not offer any housing construction loan.

Owners

Table 6.1 What size house would have you built if there was no interest-free housing loan from the government compared to the one built with the loan?

Col %	Low-Middle (n=48)	Mid-Middle (n=128)	High-Middle (n=24)	Total (n=200)
Smaller	58.3	71.9	45.8	65.5
Same	4.2	4.7	33.3	8
Not Built	33.3	16.4	8.4	19.5
Not Sure	4.2	7	12.5	7
DF= 6                      Chi-square= 32.9396                      P. Value<0.001				

Source: fieldwork, 2003-2004

Table 6.1 shows that, within the owner-occupant segment, the relationship between income level and size of dwelling built if no interest-free loans were granted is statistically significant ( $X^2= 32.9$ ,  $P< 0.001$ ). The data shows that, overall, 65.5% of respondents from all three income sub-groups said that they would have managed to build their home, but it would be smaller than their current homes. The mid-middle segment which is the larger group had the highest proportion of those who said they will build smaller homes with almost 72%. About 58% of the low-middle and about 46% of high-middle groups had said they would build smaller homes than they had actually built using the AED 500,000 government’s interest-free housing loan. According to one owner from the mid-middle group:

*If there was no interest-free loan from the government, I would have built a house that is probably half the size of my current home. My wife and I have managed to save some money and perhaps a AED 200,000 loan from a commercial bank would have allowed me to build a three bedroom home with probably 230 square metre area.*

This finding confirms that government’s assumption that all middle-class heads of households are not able to house themselves without substantial loan subsidies is not entirely accurate as more than half of them have said that they would have built their



private homes without the state's assistance in construction finance. However, the exact sizes of homes that they can build without the government's support and how adequate those sizes of dwellings could be for the sizes of households that are meant to use them differ from one individual case to another. That, of course, depends on the amount of savings they can make, how much financial help they receive from relatives and the amount of credit that they can obtain from commercial banks in the form of a personal loan. About 68% of those who said that they would build smaller dwellings also said that they would attempt to solve any shortage in construction finances by building their homes in several stages, rather than building their ultimate family home in a single stage, in order to be able to spread the cost over many years. This shows that more than two-thirds of the target population used the government's AED 500,000 to build larger homes than they could have built if they were to depend entirely on their own resources. In other words, it can be said that the loan subsidy has played the most significant role in distorting the housing consumption patterns among the recipient households.

A tiny 8% of all owner-occupant respondents had said that even without the government's interest-free loan, they would still build similar sized dwellings. More than one third (33.3%) of the high-middle segment said they could afford building similar sized homes even if they had to rely entirely on their own resources. However, because the government's policy is to provide all middle class individuals with interest-free housing loans, all eligible nationals including those who could manage building exceptionally large dwellings without government support are encouraged to apply and take advantage of the very generous and unmatched state subsidies. In the words of one homeowner from the high-middle income group who had just married and had only one small child;

*Even if the government did not offer me the interest-free loan, I would have still built the same size house which is about 510 square metre. I had plans to build with the assistance of my father in addition to my own savings, however, since I managed to get the government loan with the help of one committee member I did not need help from my father.*



Only 19.5% of all owners indicated that if they were not awarded the interest-free loan they would have not built at all. As expected, the highest percentage were from the low-middle population segment. With one third of them declaring that, without some sort of state intervention in construction finance, they would have never been able to build their own homes. Much smaller and negligible proportions of both mid-middle and high-middle income households have stated that they would have not built without government construction loan subsidies. In response to the question why he needed construction financial assistance from the government, an informant from the low-middle owner group replied;

*Although having my own home was my life dream, I am sure that if there was no interest-free loan from the government I may have not been able to build my home at all since I had no savings or relatives who can help me. Now that I have received the government loan and managed to borrow around AED 180,000 in personal loan I have built this 400 square metre villa.*

**Owners-to-be**

**Table 6.2 What size house would have you built if there was no interest-free housing loan from the government compared to the one built with the loan?**

Col %	Low-Middle (n=42)	Mid-Middle (n=93)	High-Middle (n=15)	Total (n=150)
Smaller	54.8	67.6	60	63.3
Same	2.5	2.2	26.6	4.4
Not Built	35.7	18.4	6.7	22
Not Sure	7	11.8	6.7	10.3
DF= 6	Chi-square=24.6870		P. Value<0.004	

Source: fieldwork, 2003-2004

Table 6.2 shows that, as the case was with the owner-occupant population segment, income level and size of dwelling built without state loan subsidies are correlated for the owner-to-be group ( $X^2= 24.7$ ,  $P< 0.004$ ). Despite the nearly doubling cost of construction since the inception of the loan programme about ten years ago, about two thirds (63.3%) of all owner-to-be respondents still indicated that they could and would have built a smaller dwelling if the state did not provide any construction loans.



However, fewer respondents (4.4%) had said that they would have built similar sized dwellings, while slightly more (22%) had said that they would have not built at all if no loans were provided from the government. This slight decrease in the percentage of respondents saying they would still build similar sized homes, and the small increase in the proportion of those who said that they could not build without some sort of state intervention, could be attributed to much higher rise in the cost of construction than increase of the real income per household.

Moreover, the owner-to-be participants were also asked about the size of dwellings they would have built if the state had only provided them with AED 250,000 (i.e. only 50% of the total amount of interest-free loans being granted).

**Table 6.3 What size house would have you built if you were granted an interest-free housing loan of only AED 250,000 from the government compared to the one built with the full loan of AED 500,000?**

Col %	Low-Middle (n=42)	Mid-Middle (n=93)	High-Middle (n=15)	Total (n=150)
Smaller	66.6	80.6	46.6	73.3
Same	2.5	3.2	40	6.7
Not Built	26.2	7.6	6.7	12.7
Not Sure	4.7	8.6	6.7	7.3
DF= 6                      Chi-square = 39.22                      P. Value < 0.001				

*Source: fieldwork, 2003-2004*

Table 6.3 shows, in this case, a much greater positive relationship between income level and the size of homes built if only 50% of the current loan amount was granted to each beneficiary ( $X^2= 39.2$ ,  $P< 0.001$ ). The data indicates that, under partial loan subsidy more households will be enabled to build their dwellings than with no loan subsidy, discussed above. Nearly three quarters (73.3%) of all owner-to-be participants had said that, if they were granted AED 250,000 in interest-free loan, they would have built smaller homes than they actually had. The biggest increase in the number of those who said that they would have built smaller dwellings was in the mid-middle group which jumped from 67.6% under no subsidised loan condition to 80.6% under partial interest-free loan. This represents an increase of 13%. Similarly, in the low-middle segment, the percentage of those who said they would have built smaller dwellings



under only half of the current loan value had reached 66.6% compared to only 54.8% if no interest-free loans were granted at all.

Most importantly, the data also shows that the overall percentage of those who said that they would have not built their own dwellings has dropped dramatically from 22% under zero interest-free loan to only 12.7% under AED 250,000 in interest-free loans. Meanwhile, the overall proportion of informants who revealed that they would have built similar size dwellings if they were only granted AED 250,000 had reached 6.7% compared to 4.7% if no interest-free government loan was available. The biggest increase was in the high-middle segment in which 40% mentioned that, with AED 250,000, they would build the same size housing unit compared to 33.3% when no interest-free loan were to be allocated.

### 6.3 THE ROLE OF PRIVATE FINANCING AND CREDIT

There are 42 foreign and 112 local banks in Dubai Emirate and they fiercely compete in offering personal loans to people of all incomes and for whatever purpose. Every year the banks come up with dozens of promotional loan initiatives that encourage people to take personal loans. In the UAE, the vast majority of the national population are very used to taking personal loans from commercial banks. Therefore, the problem of high and sharply increasing personal debts is one of the most widely discussed issues in the popular national media.

The latest financial reports issued by the UAE Central Bank indicate that the sum of personal loans issued to UAE citizens throughout the country to date has reached AED 40 billion (Al-Khaleej, 23/4/2005). This means that, on average, every citizen in the society including infants have a personal debt of nearly AED 85,000 (\$23,000). Loans are used to finance the purchase of new personal and family cars, paying for marriage expenses<sup>83</sup>, travelling on summer holidays, paying for children's private education, buying shares in stock markets, buying home furniture, carrying out house maintenance and a host of other less common consumer activities.

---

<sup>83</sup> The actual cost of an average a marriage and wedding celebration in Dubai Emirate is around AED 250,000 (\$68,120). This cost covers the dowry, gifts and the main wedding parties for both men and women separately (Emirates Today, 29/9/2005).



Plate 6.1 An advertisement of one of many personal loan offers provided by a bank in Dubai

**قرض شخصي مع دخل شهري إضافي**

يقدم القرض الشخصي من بنك الاتحاد الوطني فرصة للربح ولتغطية ٢,٥٠٠ درهم شهرياً لمدة عام كامل

مع القرض الشخصي من بنك الاتحاد الوطني هناك العديد من الفوائد الإضافية:

- متوفر للمواطنين والوافدين في دولة الإمارات العربية المتحدة
- مبالغ مرتفعة للقرض
- الحد الأدنى للراتب الشهري ٢,٠٠٠ درهم
- أسعار فائدة تنافسية
- مرونة في سداد الأقساط (شهرياً أو كل شهرين)
- إمكانية إعادة الجدولة/مضاعفة قيمة القرض
- ميزة سداد الإلتزامات مع التحويل الأخرى
- إمكانية سداد القسط الأول بعد ٦ أشهر
- الإعفاء من الحد الأدنى للرصيد المطلوب
- تسهيلات للتأجيل ولتغطية ٦ أقساط في العام
- ٨ سحبيات شهرية ابتداءً من ٢٠٠٥/٦/١٥
- بطاقة ائتمان مجانية

جميع القروض الشخصية تخضع لخاظمة البنك ولأحكام وشروط العرض الخاص

المزيد من المعلومات اتصل على الهاتف ٨٠٠-٢٠٠-٦٠٠ أو قم بزيارة أحد فروع بنك الاتحاد الوطني الـ ٢٧ المنتشرة في دولة الإمارات العربية المتحدة أو زوروا موقعنا الإلكتروني [www.unibac](http://www.unibac)

**بنك الاتحاد الوطني**  
UNION NATIONAL BANK  
البنك الذي يرضيك

Source: Al-Khaleej (12/7/2003)

As noted earlier, in the last few years nationals have also used personal loans to supplement the government’s interest-free housing loans for the purpose of private home construction. The amount taken in personal loans for home construction varies from one household to another, depending on the size and cost of dwellings intended to be built and the amount of savings and wealth available to the households.

Moreover, in the past four years two, local banks have set up special loan schemes targeted at those who have already been granted interest-free housing loans from the government. Their promotional advertisements clearly encourage those who are about to become homeowners to consider taking extra loans and build larger and thus more expensive homes. For instance, one of their most widely circulated printed advertisements reads.

*Your dream house is only a few steps away..... Yes, with our loan scheme you can build a house that is as big as your dreams.*



One such scheme offered a maximum loan of AED 350,000 (\$95,368). In the case of general personal loans, the banks in the UAE do not usually ask their clients about the exact purpose of taking personal loans, therefore, the total value of personal loans taken to supplement the government’s interest free housing loan is unknown. However, our data for year 2002 owner-to-be survey have shown that the mean amount of personal loans that were used for housing construction had reached AED 162,000 (\$42,413).

**Table 6.4 Have you taken personal loan to supplement your government housing construction loan?**

Col %	Low-Middle (n=42)	Mid-Middle (n=93)	High-Middle (n=15)	Total (n=150)
Yes	92.8	90.3	60	88
No	7.2	9.7	40	12
DF= 2	Chi-square= 12.55		p. value < 0.0019	

Source: fieldwork, 2003-2004

Table 6.4 shows that there is a positive relationship between income and the decision to take personal loan to supplement government loans for house construction ( $\chi^2=12.5$ ,  $P<0.0019$ ). The overall data indicates that 88% of the entire owner-to-be sample had taken high-interest personal loans for supplementing the relatively huge interest-free loan given by the government, even though each one of them could have easily built dwellings of 250 to 300 square metres using the same high and moderate quality materials and without having to add any more construction funds from any other sources. The households within both low and mid-middle population had the staggering percentages of 92.8 and 90.3 respectively. While much lower proportion of the high-middle respondents (only 60%) had taken personal loans owing to their better income level and savings and more generous family assistance.

**Table 6.5 Before you started designing your home, did you decide on a budget for construction?**

Col %	Low-Middle (n=42)	Mid-Middle (n=93)	High-Middle (n=15)	Total (n=150)
Fixed	6.3	8	46	12
Tentative	87.4	86	46	81.5
No idea	6.3	6	8	6.5
DF= 4	Chi-square= 30.495		P. value < 0.001	

Source: fieldwork, 2003-2004



Table 6.5 shows a positive relationship between income level and budgeting for house construction ( $\chi^2 = 30.5$ ,  $P < 0.001$ ). Overall, only 12% of the owner-to-be respondent indicated that they had set a fixed and final budget for the construction of their homes. Nearly half (46%) of the high-middle group revealed that they were committed to a fixed budget. This perhaps shows that heads of households in this group are better informed about planning, budgeting and control for their household expenditures.

The overwhelming majority (81.5%) of the overall respondents said that they were only able to set tentative or preliminary budgets which were open to changes as the process of design and selection of building materials and finishings of their houses were progressing. A staggering 87.4 % of the low-middle and 86% of the mid-middle households had more or less set open budgets for their construction expenses while only 46% of high-middle did so. Finally, only small percentages of the three income sub-groups had mentioned that they were entirely unsure about the budget they had to set for the construction.

What could be the reason(s) for having so many of those who are granted housing construction loans and about to become homeowners, are not being able to establish solid and final budgets for their projects and what are some of the possible ramifications of such a condition? Our investigation has led to the identification of a number of reasons.

- (1) In most cases, the subjects do not have a clear and definite idea about the ultimate size and quality of finishing materials of their future homes and, as a result, it becomes very difficult for them to determine a final or fixed budget.
- (2) The price of construction, mainly the cost of materials, change rapidly and it therefore becomes very difficult to reach a final and firm idea about the required budget.
- (3) Most of the subjects feel that, in all cases, if they need extra funds they can apply for personal loans from commercial banks or they may be



able to receive some help from close relatives. In view of such financial laxness they are not particularly worried about setting fixed budgets.

All respondents who mentioned that they had only set tentative budgets for the construction of their homes were asked if the actual final cost of construction had in any way exceeded their anticipated budgets.

**Table 6. 6 Did the actual cost of construction exceed your anticipated initial budget?**

Col %	Low-Middle (n=42)	Mid-Middle (n=93)	High-Middle (n=15)	Total (n=150)
Yes	81.3	78	66.7	77.5
No	18.7	22	33.3	22.5
DF= 2	Chi-square= 2.03		P. value < 0.3624	

*Source: fieldwork, 2003-2004*

Table 6.6 shows that, in this regard, the relationship between tentative budgeting and actual final cost of home construction for the three income sub-groups is statistically not significant ( $X^2= 2.03, P< 0.3624$ ). The data indicates that more than three quarters (77.5%) of all those respondents (i.e., from all income sub-groups) who had set tentative home construction budgets had in fact exceeded those budgets and had to increase their capital by drawing funds from other sources mainly through borrowing high-interest personal loans from commercial banks. The deviation between the preliminary capital budget and actual construction cost had ranged for as low as AED 50,000 to as high as AED 275,000 in some instances which sums up to 55% of the value of the governmental loan.

However, this does not mean that all those who were granted government loans have always managed to secure the additional funds required to finance the construction of the houses they planned for. Local newspapers have reported on several occasions that, even two or three years after interest-free loans were granted, many of those mainly belonging to the low-middle and mid-middle income groups were not able to build their homes because they had designed homes that cost much more than the allocated AED 500,000 loan amount (Al-Bayan, 2/11/1999). Another sign of some loan beneficiaries' inability to fully secure the additional cash can be seen in the increasing



number of homes that are built but not completed for many years owing to shortage in funding, but primarily because of the desire and insistence on building large and expensive homes which are beyond the economic and financial abilities of their owners.

**Plate 6.2 This villa has been standing incomplete for over two years because its owner could not secure adequate funds to finish it**



*Source: Author, 2004*

The rise in the number of those who were granted interest-free loans and were unwilling to start building or unable to finish the construction of their private homes indicates the following;

- (1) That most of the of targeted loan beneficiaries have become adamant that they should build much larger dwellings in line with prevailing trends and norms even if they were not able to find the extra finances required to build.
- (2) The majority of the target population rejects the concept of incremental housing extension and insists on building the ultimate family home in



one single phase. (Owing to its important role, this issue will be further investigated in a later section of this chapter).

## 6.4 SOCIO-CULTURAL FACTORS

Housing consumption can be driven by functional needs as well as social needs. Recent research has identified two important interpersonal social factors that directly and indirectly influence people's consumption decisions. Those are the desire for social prestige and distinction and the countervailing need for similarity and conformity (Amaldoss, 2002). Nevertheless, both factors are motivated by the inherent human desire for securing particular social position and status within the social group in which one lives.

Moreover, status as suggested by Eastman, Goldsmith and Flynn (1999: 42) is acquired through three distinct methods which are practiced and accepted in various societies around the world (1) status by *birth* or *assignment* which is inherited or granted by marriage (2) status by *merit* and *achievement* which is normally granted for outstanding or distinctive performance or contribution, and (3) status by *consumption* which is acquired through the purchase and public display of various material and pecuniary products. The latter has gained global popularity since the middle of the last century particularly in industrialised societies where mass production of consumer goods dominated the trading market. Status-consumption has also been identified as one of the main forces behind the global rise in the consumerist cultures in most urban settings around the world (Lury, 1996).

With respect to the UAE context and as explained by Melikian (1988: 114), in the pre-oil subsistence society,

*Life was frugal, differences in observable wealth were few, and there were no formalities that stressed social stratification. Status depended primarily on age and piety and not on wealth....individualism was not encouraged and there was a strong feeling of community.*



However, after oil was discovered and the society became much more affluent, interpersonal and social group relationships were dramatically altered in a way that,

*Tribal identification gave way to a class system based on wealth, individualism emerged..... Frugality gave way to luxury, affluence and consumerism [and] simplicity to complexity; all of which necessitated the need for new ways- new life-styles (Melikian, 1988: 115).*

Abu Shehab (2000) argues that in contemporary affluent post-oil UAE society and as consumerism intensifies, people's individual and collective value and place in society is almost reduced to the amount and price of material possessions they can purchase and display. Therefore, most people are involved in constant and seemingly endless competition for elevating and maintaining their social status and position in society<sup>84</sup> by indulging in further and further material and pecuniary display of all sorts of modern consumption products; from luxury cars to the latest and most sophisticated mobile phone hand-sets and from lavish wedding parties to expensive and extravagant homes.

#### 6.4.1 SOCIAL PRESTIGE AND DISTINCTION

Despite the wide public usage of the term prestige, there is very little consensus relating to the precise definition of the terminology (see for instance, Dittmar, 1992; Mason, 1981). However, in the context of consumption and according to Vigneron and Johnson (1999) the purchase and display of prestige products is typically intended and understood as a signal of status, wealth and exceptional taste, all of which are used to draw attention and enhance and maintain the social standing of its consumer. Moreover, prestige products must entail some degree of exclusivity (uniqueness) and their price are often expensive by normal standards (Wegener, 1992).

---

<sup>84</sup> Moreover, in the Dubai Emirate as well as in the rest of the UAE, conspicuous display of material affluence not only enhances one's social prestige among one's peers and close associates, but it also secures preferential treatment by strangers and officials. For instance, a person who drives a luxurious car is a lot more likely to receive exceptional cooperation and respect from other drivers who share the road with him or her. Additionally, because a luxurious car is often associated with high socio-economic status which in turn signals high possibilities of stronger ties with high-ranking individuals in governmental authorities, the person in the luxurious car is also much less likely to be stopped by the traffic police if a violation is committed.



The purchase and display of prestige products in Dubai Emirate by middle-class citizens take many different forms. However, in the housing context, our investigation has revealed that social prestige and distinction are achieved through two main categorical features which are:

(1) *external features* of the private dwellings that can be seen and appreciated by anyone and they include items such as:

- (a) the overall size of the villa
- (b) number of floors (storeys)
- (c) architectural style and design details of home facade and elevations
- (d) colour of the villa
- (e) design of main entrance gate
- (f) front garden.

(2) *internal features* of the private dwellings that can only be seen and experienced by those who are invited into the house, they include:

- (a) number and diversity of types of rooms in the house
- (b) size of rooms, mainly guest reception and living rooms
- (c) furniture
- (d) details of home decoration
- (e) availability of swimming pool

To understand the importance of the role housing unit *size* in exposing the social prestige and status of the owner and his/ her household, each participant from the owner-to-be group was asked if the size of his/ her dwelling was important for exposing his/ her social status and prestige.

**Table 6.7** Is the size of your house important for exposing your social status and prestige?

Col %	Low-Middle (n=42)	Mid-Middle (n=93)	High-Middle (n=15)	Total (n=150)
Important	7	21.5	80	23
Neither	9.6	6.5	13.3	8.3
Unimportant	83.4	72	6.7	68.7
DF= 4                      Chi-Square=36.2956                      P.value < 0.001				

Source: fieldwork, 2003-2004



Table 6.7 shows that the relationship between income level and perception of dwelling size as a significant sign for the communication of one’s distinct social status to others is statistically significant ( $X^2= 36.3, P<0.001$ ). The higher the income the greater the desire to use dwelling size to reflect one’s unique social status to others in the group. While only 23% of the overall population sample have admitted that size was a critical signal for exposing their unique social status, a staggering 80% of the high-middle segment said that size was a significant housing feature for exposing their social distinction and prestige. This is probably because most high-middle income population are typically comprised of those who occupy higher managerial and professional level positions within government departments and institutions. In high power distance cultures like the one that exists in Dubai, differences in power are expected to be manifested in visible differences in status (Hofstede, 2000). Therefore, conspicuous consumption corresponds directly with status propriety. For instance, higher level managers are socially expected to drive more expensive cars, have bigger and more elaborate homes and go on more fancy holidays than their subordinates.

**Table 6.8 The “means” of dwelling size and consumption indicators and importance of dwelling size for exposing distinct social status and prestige**

Indicators	Important	Unimportant
<i>Built-up floor area (m²)</i>	484	423
<i>Floor area/ person (m²)</i>	98.8	86.3
<i>Number of habitable rooms</i>	10.2	8.4
<i>Habitable room/ person</i>	2.1	1.7
<i>Number of floors</i>	2	1.5
<i>Number of Guest Room</i>	1.6	1.1

*Source: fieldwork, 2003-2004*

Table 6.8 clearly shows that those homeowners who seek social distinction and prestige through the size of their dwellings have indeed invested more in their homes than those who do not see size as an important indicator of social prestige. Our data from the owner-to-be survey shows that respondents who said that the size of their homes was important for exposing their social status and prestige have scored higher in virtually all housing size and space consumption indicators.



- (1) In general, they had built more conspicuous homes. The average size of their dwellings were larger by 61 square metres, i.e., by 12.6%. As a result of that, the overall average per capita space consumption is also higher by 12.5 square metres. This could very well be driven by their deliberate desire to signal their socio-economic status through housing consumption to others within their social groups.
- (2) The average number of habitable rooms in the dwellings of those who seek social prestige through size was also higher by nearly two rooms. Thus their number of habitable rooms per person reached 2.1 compared to 1.7 for those who indicated that the house size was not important in exposing their social status.
- (3) All dwellings of those who seek distinction by size were built on two floors (i.e. ground plus one), while only half of those who did not seek social prestige from the size of their homes were built as two floors and the other half were only built as single ground floor.
- (4) More than half (56%) of the dwellings of respondents who desired social distinction through size had two guest reception rooms (*majlis*) one for male and the other for females guests. Only 8% of those who said they did not seek distinction from home size had two guest reception rooms.

Of course, there are other visible elements in housing beyond the mere size that are used to gain some degree of distinction in the eyes of individuals within the respective social groups. The architectural design and style of the external elevations and façade of middle-class homes are now extensively employed for achieving social prestige and distinction. Most homeowners lay a great deal of emphasis on having designs that are attractive, creative and, perhaps, above all unique. In fact, when it comes to the design of home elevations a large proportion of homeowners ask their architects to come up with designs that have never been made before. Others choose designs that are alien and not very common in the region. Those clients who are very particular about the importance of the home façade sometimes spend months before a design is chosen.



Plates 6.3, 6.4, 6.5 and 6.6 show a selection of different architectural styles that are found in Dubai's middle-class suburban fringes.

For some clients home elevation was the most important design aspect and was even given priority over floor and lay out plan. Interestingly enough, there were many reported cases where prospective homeowners brought along photographs or drawings of elevations that they passionately liked and ask their consultants to come up with floor plans that would fit those preferred elevation designs. Such practices also indicate the poor and superficial knowledge of housing design on behalf of government housing loan beneficiaries.

At one time when the researcher phoned one of the mid-middle homeowners to set up an appointment for an interview, and when the potential participant was giving directions<sup>85</sup> to his home, the place of interview, he described the house as not being very big (of course in comparison with his close neighbours) but it had a very distinctive exterior elevation design and for that, he said, you will not miss it.

Moreover, a number of design consultants have revealed that they had clients who asked for their villas to be raised as high as possible and allowable by local regulations from ground level<sup>86</sup>, so they can stand out and be more visible within their immediate surroundings. During his nighttime field observation, the researcher came across many instances where the owners of large two storey villas had projected high voltage flood lighting onto their front elevations<sup>87</sup>. When approached and asked why they had decided to do that most respondents gave the following reply; the projection of strong lighting onto my villa will help make it clearly visible at night, so that neighbours, visitors and passers-by can see it and appreciate its special design features.

---

<sup>85</sup> Despite the existence of an address system in Dubai, most people are not familiar with it and they tend to describe the routes and features to and near their concerned location.

<sup>86</sup> Note that the maximum allowable building height by local zoning regulation is ground plus one floor for single-household low-density districts.

<sup>87</sup> Such practices are normally applied to important public buildings and monumental landmarks.



**Plate 6.3 A modern villa façade design**



*Source: Fieldwork, 2003-2004*

**Plate 6.4 Classical Greek villa façade**



*Source: Fieldwork, 2003-2004*



**Plate 6.5 A contemporary villa in a traditional elevation design**



*Source: Fieldwork, 2003-2004*

**Plate 6.6 A villa built with an elevation known locally as the ‘American style’**



*Source: Fieldwork, 2003-2004*



The colour of the external parts of the house is often used in ways that make the house look distinctive. While white is the most popular colour, some homeowners use other less common colours, a few have even gone much further in their search for a truly distinctive colour. According to a consultant who had worked on many middle-class homes, one of his clients insisted on coming up with a truly unique colour for his villa and for that he disregarded all the colour options available in the market and asked the subcontractor who was handling the painting job to prepare 48 separate mixtures of different paint colours for him to choose from. Finally, two months later he arrived at a choice. His objective was to choose a colour that both did not exist in other houses and that cannot be easily copied by others. By doing so his aim was most probably to attain a symbolic distinction through one of the most visible aspect of the house and to maintain such distinction for as long as possible. Lately, the use of artificial cladding stone of different colours and shapes instead of paint on the external surface of the villas has been gaining popularity among middle-class homeowners.

Other owners seek house distinction in specific design features such as building glass domes or several small and large balconies that may not have any real practical function or use within the local environmental and social settings.

**Plate 6.7 A stained-glass dome in a contemporary middle-class villa in Dubai**



*Source: Fieldwork, 2003-2004*



### 6.4.2 SOCIAL INFLUENCE AND CONFORMITY

Just the exact opposite of social distinction is social conformity. It is a general social-psychological human phenomenon that can be defined as ‘the tendency to align one’s behaviour, opinions and perceptions in ways that are consistent with group norms as a result of real or imagined pressure from a person or group of people’ (Nir, 2004:4). Since the middle of last century, social influence and conformity have become a central theme of research in the sub-specialty disciplines of social psychology and consumer behaviour. The topic has a well established theoretical base that has been developed as a result of both controlled laboratory experimental studies and real life observational research.

In the context of consumption, conformity can be defined as ‘a force that causes people to want to consume particular goods and services as much as others in their groups and not more than them’ (Nir, 2004: 4). Economists and social and behavioural scientists have come to terms with the importance of social and psychological factors as significant determinants of people’s consumption patterns across all societies.

*It has long been recognized that an individual’s utility, in addition to his/her own current and past consumption decisions, may be influenced by a variety of social interactions such as conformism or jealousy towards peers’ behavior (Binder and Pesaran, 2001: 36) (emphasis added).*

Numerous quantitative and qualitative studies carried out in different countries have examined the potential effects of social influence on individual and household consumption decisions of both expensive durable and less expensive durable and non-durable goods. For instance, Grinblatt, Keloharju and Ikaheimo (2003) within the Finnish context, have found that the decisions taken by individuals to buy a certain make and model of cars were to a large extent influenced by what their neighbours have bought.

Other studies conducted on certain goods, such as fashion clothing (Piacentini and Mailer, 2004), mobile phone handsets (Wilska, 2003), home gardens (Askew and



Mcguirk, 2004) and brands of bread (Stafford, 1966), have also found that members of various age, socio-economic, gender and ethnic groups tended to conform to the style, brand, model and sizes selected by others in the same group.

Moreover, national and cross-cultural studies on social influence and conformity have shown that societies that are predominantly *collectivistic* or group-oriented (i.e. those with cultures that emphasize the importance of groups as opposed to individuals) tend to show higher levels of conformity to group norms and pressures than *individualistic* countries that are person-oriented (See for instance, Bond and Smith, 1996; Markus and Kitayama, 1991; Furnham, 1984 ). This is because as argued by de Mooj (2004: 34), in collectivistic cultures, 'identity is based on the social network to which one belongs', whereas in individualistic cultures people often 'differentiate themselves from others'. In other words, individualism-collectivism dimensions represent the degree to which an individual or a group of cohesive individuals (e.g., a household) consider the requirement of others over his or their own individual requirements in making consumption decisions (Park, 1998). Nevertheless, difference in individual personality plays a major role in the level of susceptibility to conformity, as those with low self-esteem are for instance found to have shown higher propensity for social conformity than people with high self-esteem (Clark and Goldsmith, 2005).

A plethora of ethnographical studies on the cultural traits of Arab societies have found that Arab's interpersonal and inter-groups social relations tend to stress the importance of being similar and submissive to group norms, thus cultivating an inherently conformist attitude amongst their members (see for instance, Walker, 2004; de Atkine, 2000; Sagy, Orr, Bar-On and Awwad, 2001; Amir, 1984; Patai, 2002; Abu Shehab, 2000). This perhaps stems out of 'the tribal nature of Arab society, [in which] individuals typically subordinate personal aspirations for the good of the collective' (Richardson, 2004: 433).

The situation in the UAE is more or less the same as that of Arabs in other countries. Despite the paucity of previous experimental and observational studies of social influence on individual and group behaviour carried out in the country, strong signs of inclination toward the importance of group conformity can be depicted from the day-to-day social interactions and dealings among individuals and social groups. To



illustrate, there are, for instance, a number of traditional and popular sayings that are frequently recited by people in the UAE when someone behaves or expresses a view that contradicts or differs from the prevalent or practiced norms. One such saying is;

**“Kel matehebeh nafsek, w’aelbas ma y’ajeb el’nass”<sup>88</sup>**

***“Eat as you wish and wear what people want you to wear”***

The essence of such a social-cultural value is that, if one carries out an activity in an overt way (e.g., the clothes one wears in public), then one would need to do exactly what others around one expect one to do and conversely if a person is doing something in private (e.g. eating in the privacy of one’s own home) then one may not need to fear or worry about others’ reactions or judgments. From an early age, young people in the Emirati society are made aware of the importance of maintaining an acceptable public image.

In communities throughout the UAE, maintaining one’s personal and family reputation is linked to one’s adherence to the established sets of norms and social standards and practices. Therefore, if one attempts to deviate from such norms or fails to satisfy group expectations, he or she may be perceived by others as letting one’s self, family or society down. Expressions such as *‘do something that will raise our heads high’* are commonly used among people to remind group members of the importance of saving one’s reputation in the community by simply conforming to group norms. It would not be an exaggeration to say that, because of such strong inherent importance given to adherence to the prevailing societal norms, most people have developed a natural and overwhelming inhibition about the way others around them may judge their action or behaviour.

Furthermore, from an anthropological prospective, the UAE society can be clearly characterised as being a predominantly shame-based culture<sup>89</sup> where fear of being

<sup>88</sup> This saying was also found in most references on local proverbs of the UAE, see for instance Ben Sandel, O. (2001: 88).

<sup>89</sup> In anthropological theory, societies are broadly characterized as either being;

(1) shame-based ‘in which individuals are controlled by public threats to personal reputation and honour. Public shame reflects not on the individual, but on his or her family and kin’ (Abercrombie, Hill and Turner, 2000: 314).

(2) Guilt-based in which individuals are controlled through an internalized value system. You (1997: 57) argues that ‘it is dangerous to define one culture as shame-based and another as guilt-based, for we may see both characteristics in one culture. It is a matter of which is more dominant’.



subjected to public shame as a result of failing to follow group norms and standards is considered as the most important form of social control. Such a strong form of social control mechanism is responsible for placing tremendous moral and psychological pressures forcing people often to strive to follow those established norms in order to avoid bringing shame not only upon themselves, but on their entire family. The combined pressures of conformity and avoidance of shame and loss of face are so formidable that, in most circumstances, even if the practiced norms of the society contradict with one’s own sets of values, one will find it impossible to evade such norms and do whatever one finds most adequate. In a nutshell, in this kind of social order ‘the emphasis is [highly] upon *appearance* and *conformity* in response to an *external social view*’ (Pattison, 2000: 54) [emphasis added].

In large and cosmopolitan urban settings such as the one encountered in Dubai, people are more likely to be directly influenced by what Blythe (1997: 99) calls the *primary groups*, also known as social reference groups, as opposed to the wider community. Such groups are composed of people whom we most often see and interact with, for example relatives, friends, colleagues and neighbours. This is owing to the presence of more intense social bonds, interactions and interdependence. However, that does not mean that people outside of primary groups do not exert any influence on the individuals concerned.

To understand the relationship between cultural values and homeowners’ susceptibility to interpersonal and group influence with regard to the size of homes they decided to build, each participant from the owner-to-be sample was asked if it was important to them that their homes were as big as those of their primary group (i.e. relatives, friends, neighbours, etc.)

**Table 6.9 Is it important that your home should be as big as your relatives, friends and neighbours’ homes?**

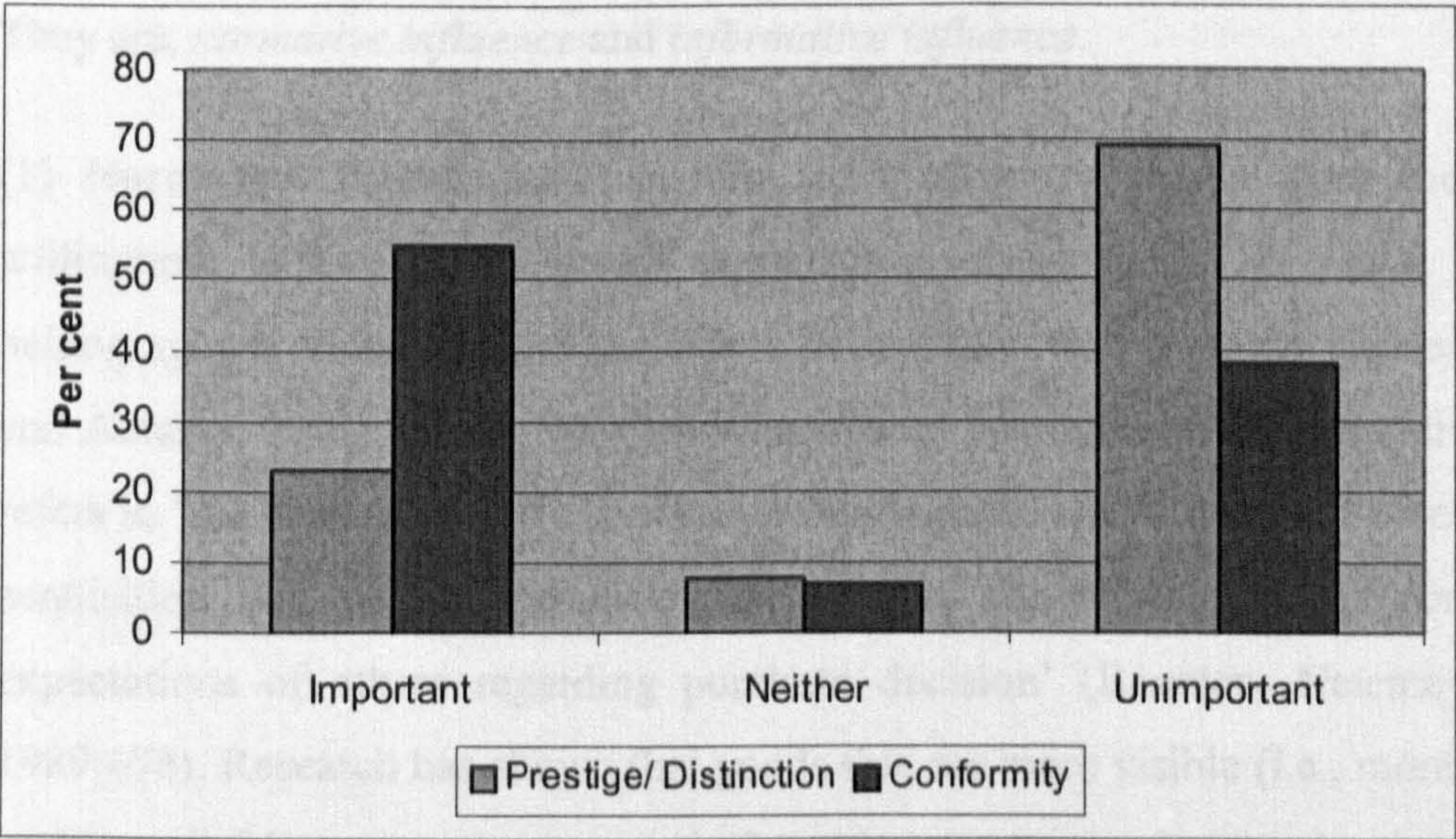
Col %	Low-Middle (n=42)	Mid-Middle (n=93)	High-Middle (n=15)	Total (n=150)
Important	57	61.3	13.3	55.3
Neither	12	5.4	6.7	7.4
Unimportant	31	33.3	80	37.3
DF= 4                      Chi-square= 15.265                      P.value<0.0042				

Source: fieldwork, 2003-2004



Table 6.9 shows that the relationship between income level and concern about conforming to the sizes of homes of other people within one’s social group is statistically significant ( $X^2= 15.3, P < 0.0042$ ). The data indicates that both mid-middle and low-middle groups have much higher inclination to be influenced by the housing norms prevalent among others in the social groups than those in the high-middle group. This, perhaps, can be explained by the fact that those in low and mid-middle segments usually have lower educational attainment and less exposure to alternative housing consumption choices which can ultimately lead to higher susceptibility to conformity to group norms.

**Figure 6.2 Respondents’ perceptions of the social importance of dwelling size**



Source: fieldwork, 2003-2004

Figure 6.2 shows that in absolute terms the propensity of the study population to build big homes is driven much more by forces of conformity to social influence (sameness) rather than the desire for social distinction and prestige (different or unique, i.e., bigger than the majority in their groups). The overall result shows that while more than half (55 per cent) of those surveyed have said that it was important to them that the sizes of their homes were as large as those of the primary social group, only 23 per cent indicated that the sizes of their homes were seen as an important sign of social distinction and prestige within their reference groups, suggesting their preference for building bigger homes than others within their group. Despite the apparent shift away



from conformist-oriented consumption to status-seeking consumption since the late 1980s, results from the survey highlight the intrinsic collectivistic nature of the society, thus, the importance of conformity to consumption norms and patterns that exist within one's social group.

#### 6.4.2.1 WHY CONFORM?

So why do so many home owners agree on the importance of consuming homes that are similar in size to their relevant social groups? Following early conceptual work by Deutsch and Gerrard (1955) and Burnkrant and Cousineau (1975), researchers in the fields of social psychology and consumer psychology, have identified and extensively studied two major types of social influence that can often result in people choosing to conform to the consumption pattern and choices of others within their reference groups. They are, *normative influence* and *informative influence*.

(1) **Normative Influence:** This form of conformity results from the individual's willingness to live up to group expectations in exchange for social approval and belongingness (*rewards*) and avoidance of rejection and isolation (*punishment*) (Hogg and Abrams, 2001; Turner, 1996). In the context of consumption, normative conformity refers to 'the need to identify or enhance one's image with significant others through the acquisition and use of products and brands, the willingness to conform to the expectations of others regarding purchase decision' (Bearden, Netemeyer and Teel, 1989:474). Research has shown that goods that are more visible (i.e., more conspicuous) such as clothing, cars, *homes*, etc. often play more prominent roles in the normative influence, whereas less visible or noticeable products are subjected to much less intense normative influence (See, for instance, Fisher and Price, 1992). Moreover, recent studies have found that the greater the number of the norm followers in the group, the greater the likelihood of other people conforming to the consumption norms and patterns prevalent in the group (Clark and Goldsmith, 2005).

(2) **Informative Influence:** This form of conformity results from both individual's need to be *correct* and his/ her tendency to perceive and accept information about consumption patterns of others in his/ her group as being indicative of reality and correctness (Turner, 1996; Hogg and Abrams, 2001). Research has found that the more complex, technical and ambiguous the consumption choice, the higher the tendency to conform to



informational influence (Bearden, Netemeyer and Teel, 1989). In such circumstances, others are viewed as experts, knowledgeable actors in the group and therefore, worthy of adopting their actions.

**Table 6.10 Distribution of conformity to dwelling size by type of conformity motives**

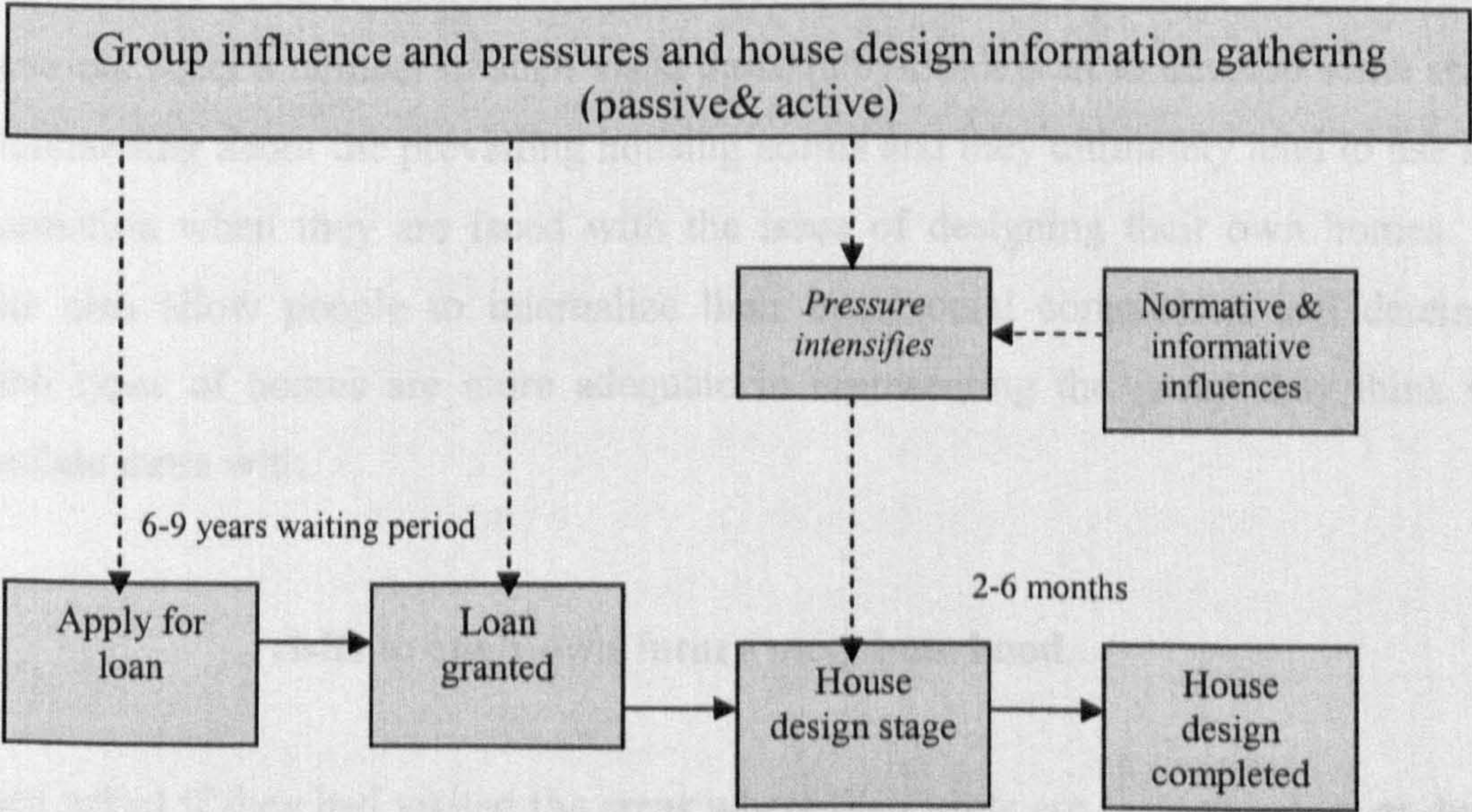
Type of Conformity	Percentage
Normative	77
Informative	23

Source: fieldwork, 2003-2004

The data in table 6.10 shows that the respondents had higher susceptibility to conform to normative influence. More than three quarters (77 per cent) of those who said that they prefer the size of their homes to be similar to the sizes of homes belonging to others in their reference groups have given reasons that correspond to normative influence (*some of those will be discussed below*). Such an outcome highlights the importance of living to the groups’ expectation in order to enhance and maintain a positive image. Less than a quarter (23 per cent) gave reasons that fall under the informative influence.

Conceptual Framework of Social Influence on Home Design

**Figure 6.3 A conceptual framework of social influence (conformity) in housing design process**



Source: Author



Figure 6.3 presents a conceptual framework for the social influence in the context of middle-class private housing design. The diagram shows that social influence related to housing design features and choice is an ongoing process that starts as early as the time when the loan application is submitted. Social influence regarding housing standards and norms continue throughout the waiting period which by today's trend can last between six and nine years. However, once the loan is granted and the design process started, social influence intensifies since most clients actively begin to seek information that can help them to identify the features of a socially-correct housing design solutions as they are only given six months to complete the design and start the construction work. The discussion below will highlight some of the most important methods and means of both active and passive information gathering within the interactive environment of social influence.

#### **6.4.2.2 Social Influence Information Gathering Sources and Methods**

##### **(1) visits to homes of others within the social group.**

While waiting for their loans to be approved and when they start the actual design process of their homes, most prospective homeowners are exposed to homes of people who are probably members of the same social group. During those visits either passively or actively individuals tend to gather information about the physical characteristics of those homes including size, layout design, elevation design, furniture and so on. After a number of such visits those individuals start to develop some sort of understanding about the prevailing housing norms and they ultimately tend to use such information when they are faced with the issue of designing their own homes. The visits also allow people to internalize their own social comparison and determine which types of homes are more adequate in representing the group they think they associate more with.

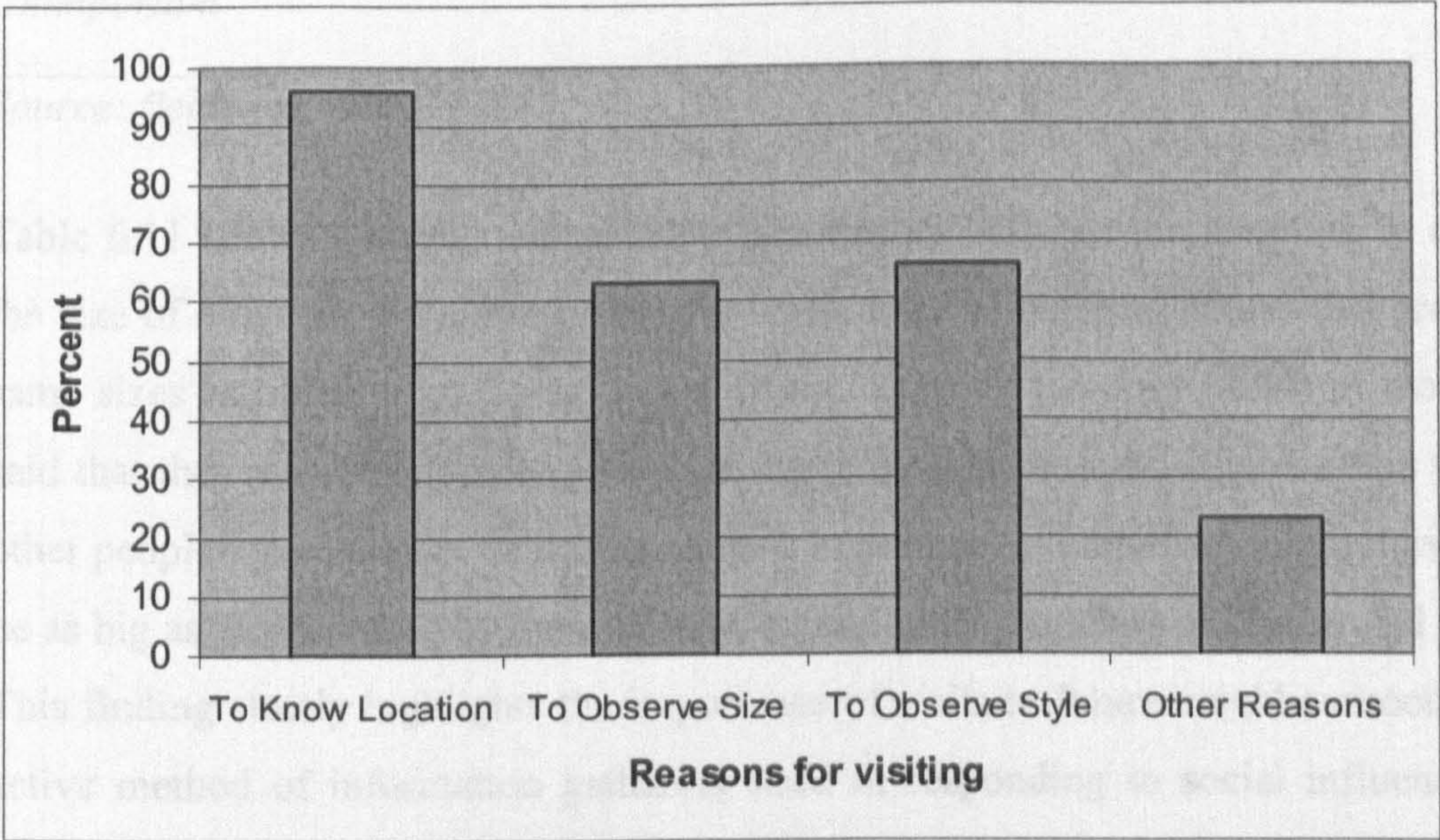
##### **(2) visits to one's own future neighbourhood.**

When asked if they had visited the areas where their plots are located before or during the designing stage of their home, 94% of the owner-to-be respondents gave positive



responses. Nowadays, it has become a common pre-design practice for young men with their wives to drive around residential areas looking at other people’s homes in order to gain a first hand insight into what kind of homes neighbours and relatives are building.

**Figure 6.4 Reasons for visiting before and or during home design stage**



*Source: fieldwork: 2003-2004*

The respondents were also asked to indicate all the reason(s) for such visits which means that each respondent could choose more than one reason if it applies. As summarised in figure 6.4, 96% said they decided to visit so they become familiar with the location of their plot. More than two thirds 63% confirmed that they intended to look at the sizes of homes already built in the area around their plot. The sizes of existing dwellings is normally examined through both external visual observation and by surveying the inside of some houses that are still under construction or finished but still unoccupied. Examination of size includes checking if neighbours had built one or two floors. 66% said they visited to observe the architectural style to learn and compare various design concepts. 23% mentioned other reasons such as to see if services like local shops and public facilities are available close to their homes. Other respondents had indicated that they wanted to become familiar with different types of building materials and home finishing.



**Table 6.11 Those who visited to observe the sizes of homes built by others and the importance of conformity to sizes of homes of others in the social group**

<i>Importance of conformity</i>	<i>% of those visited to observe size</i>
<i>Important</i>	<i>81.8</i>
<i>Neither</i>	<i>8.5</i>
<i>Unimportant</i>	<i>9.7</i>

*Source: fieldwork, 2003-2004*

Table 6.11 shows a strong and positive relationship between the intention to observe the size of other people’s homes and the importance of building homes that are of the same sizes as others in the same social group. The vast majority (82%) of those who said that they did intentionally visit their future neighbourhoods to look at the sizes of other people’s homes also replied that it was important to them that their homes should be as big as those owned by their neighbours and other members of their social groups. This finding clearly highlights the importance of visits to future neighbourhoods as an active method of information gathering used in responding to social influence with regard to private housing design.

**(3) examination of floor plans of others in the group.**

Before starting to design their own homes, most middle-class potential homeowners look at several floor plans and elevation designs of homes belonging to other people within their social groups. They also ask their consultants for copies of previous plans that they had done for other clients. The aim of such an exercise is perhaps to acquire more knowledge about home design, but more importantly to become familiar with the prevailing housing norms and standards, so they can avoid designing and building something that is below par or less up to date. Examination of plans often includes elements such as the number, types and sizes of domestic spaces, overall form of the house and front elevations. Moreover, there were many cases where clients decided to choose the exact housing design layouts of other people or perhaps with some minor modifications but without thoroughly examining the suitability of such plans to their actual needs and budgets.



**(4) ask for opinions and advice from others on one's home design**

The vast majority (95%) of the owner-to-be informants have said that they had involved people other than their architects in the selection of the final design of their homes. As the coming discussion will highlight, all married respondents said that they had involved their wives in the entire design and selection of home finishing materials. Moreover, a great majority (89%) of the respondents have also mentioned that they asked friends, relatives and colleagues for opinion and advice on their preliminary and final design elements including the number and sizes of rooms. The respondents have also indicated that they were more keen to seek the advice of those people who have gone through the design and construction of their homes on the assumption that those who have designed and built their homes are experts in housing design. If the potential homeowner was particularly impressed with certain design features of a friend or a relative's home, he would then insist on getting advice from that person.

**(5) attend housewarming parties.**

Invitation of relatives and friends to housewarming parties (known locally as al-howleh) is a relatively new phenomenon among the middle-class families in Dubai Emirate. Most wives who move into their new homes organize special parties for female relatives and close friends in which they show them around the house. Even if she does not wish to organise a special housewarming reception she will be under social and moral pressure from some curious relatives or friends who are usually very keen to have a look at the taste and investment people make in their homes. This is an important event for almost all women and every effort is made to make the place look at its best. The aim is to have a perfect setting in order to impress the visitors with respect to home design, decoration and furniture. Those women who frequently attend housewarming parties often compare different aspects of whatever they have seen in different homes. Without a doubt, attendance of housewarming parties plays a very important role in information gathering about the prevailing trends and housing standards which they use when time comes to design their own homes.



**(6) family television serials and drama:**

Contemporary national and regional television serials and soap operas that are produced in the Arab Gulf countries and involve family life often take place in huge and extravagant villas with seemingly over-designed features such as wide and elaborate spiral staircases and lots of bulky furniture and colourful decorative elements. Because of the frequent repetitions of such images, in the minds of many of their viewers, the settings where such programmes are filmed portray the ideal image of a happy middle-class household lifestyle. Therefore, they tend to become important sources of information about real life choices. It must be said that women and female members of households are more exposed to such media messages as they have more tendency to be at home and spend a great deal of their time watching television. A few design architects have mentioned that they had clients who asked them for design of living rooms and guest reception rooms similar to those design features they saw on television.

### **6.4.2.3 NORMATIVE CONFORMITY**

#### **6.4.2.3.1 FEAR OF RIDICULE AND CRITICISM**

According to Heller (2003:1020), in a shame-based culture like the one that exists in Dubai, 'the eye of the others functions as a moral authority' that can strongly regulate people's behaviour and action in society. Intrinsically in such cultural contexts, people both as individuals and groups always feel that they are under the '*collective scrutiny*' of others in the groups and, in view of that, members of the groups would need to learn 'of what might bring failure in the eyes of others and take steps to avoid it' (Gilbert, 2003: 1219).

For instance, it has become a standard practice among most middle-class families that, during the preparation periods for wedding ceremonies, they will almost always book more seats and dinner meals in wedding celebration halls than the number of people being formally invited, so that if more people show up there will be enough space and food for them. The local expression used in such instances is 'ye'zeed wala yenqus' which means 'let it be more, better than less', so that the family will not have to face



embarrassment and be ashamed by other people in case more people turned out. In the tens of cases that I am aware of, fewer people than actually invited had shown up and a lot of money and effort were wasted as a result of over-booking which is most often driven by fear of shame and criticism.

Figure 6.5 A cartoon from a local newspaper in Dubai



Alemarat Alyoum Arabic Daily Newspaper (13/7/2006)

Concern about what others may think of us even goes beyond personal and family level. For example, a well-known local columnist who writes in a national daily newspaper wrote once about the problem of squatter homes in some of the less affluent northern emirates. After criticizing those squatter homes for their negative health and social impacts on their dwellers, he concluded his column with the following statement;

*The presence of those sorts of areas is very bad, especially, that foreign visitors and tourists who may see them will draw a negative picture about the country (Al-Itihad, 15/7/2004) [emphasis added].*

Another local person writes a letter to the local newspaper to express his opinion on the lack of adequate legislation to ensure greater protection for the consumers. He also



concludes his statement with expressing his fear of others' negative views about the country and its people;

*I wonder what the millions of foreigners who visit the country every year would say about us (Al-Bayan, 19/2/2004) [emphasis added].*

Fear of shame and ridicule can also be easily detected from public statements made by high ranking bureaucrats. It has been frequently reported that many construction and services companies delay paying the wages of their low-paid foreign workers sometimes for several months, in one instance a press release that was given by a top government official emphasised that such practices will only help in damaging our country's reputation in the eyes of people in other countries (Emirates Today 5/10/2005). Sadly enough, the statement did not refer to the horrible effect of such unacceptable and illegal practices on the victimised workers, rather the biggest issue to him was jeopardizing the image of the country in the eyes of others.

In a more personal and housing-related matter and during one of author's visits to the office of Private Housing Finance Scheme (PHFS), one new homeowner came to complain about the quality of the finishing of his contractor and said in a very spontaneous tone;

*A few days after moving into my new villa, I noticed how bad was the finishing of the floor marble in my living room. For that we are embarrassed to invite our relatives to visit our new house. This has taken more than three weeks and our relatives who are very keen to see our new villa are beginning to feel that something is terribly wrong or bad with our house. I urge you to pressure the contractor to come and do something about it quickly.*

Within the newly established middle-class consumerist norms, smaller and more compact homes are being increasingly perceived as an indication or a signal of their owners being poor or from the lower socioeconomic classes. Thus, dwelling size has gained a significant symbolic meaning in terms of one's economic success and achievement in society. Heller (2003: 1026) argues that 'a person is put to shame



whenever he is regarded as having fallen below the standards or not having enough of something'. In this very context, it is the 'shame of deficit' that many want to avoid so they can be 'valued, respected, and approved of as a person- and thus not shamed- by conforming to group norms' (Gilbert, 2003: 1212). Because building smaller and less conspicuous homes than the majority within the social group will bring shame of deficit upon their owners, the only way to escape that is to build bigger homes like everybody else, regardless of high cost and actual needs of their users. When asked why he thought that his home should not be smaller than those belonging to others within his social group, an informant from the mid-middle owner-to-be group replied;

*To be frank with you, I don't want people to look at my house and think that I am some kind of poor or low-income person, since most homes built around me are big.*

Another person who was particularly keen on building large guest reception (*majlis*) and dining rooms stated that;

*Tomorrow when we start receiving guests in our majlis, how would we all look if there was not enough space for everyone? What would people say about us especially when everybody else have one or two spacious majlis in their homes?*

#### 6.4.2.3.2 ALTRUISM AND FEAR OF SOCIAL STIGMA

However, avoidance of shame of deficit upon homeowners themselves is not the only drive behind normative conformity in the context of housing consumption. As stated earlier, the substantial increase in personal and household income in addition to generous government housing subsidies that started in the early 1990s have played a key role in the development of high housing standards among most middle-class households compared to previous times. Today, and in view of rising consumerism in society, most parents feel obliged to satisfy the material requirements of their children in the way that it would not subject them to social stigma<sup>90</sup> and the feeling of being less attended to than

---

<sup>90</sup> 'Stigma implies the possession of a low status in the eyes of society: to occupy, and to be seen to occupy an inferior social rank.' (Fitzpatrick, 1999: 267).



their peers. For instance, one frequent answer given by many owner-to-be participants for importance of conforming to the prevailing housing consumption norms within their social group was;

*I don't want my children to feel that they are less privileged than the other kids around them.*

This position is further reinforced by the fact that many of the new heads of households had themselves lived in small over-crowded homes when they were growing up during the 1970s and 80s. Therefore, they were not prepared to let their children be deprived in the same way. This argument can also be extended to the provision of other material goods for the children including designer clothing, toys, expensive private education, holidays and other types of consumption goods and services.

#### **6.4.2.3.3 'WE ARE NOT LESS THAN THEM' (JEALOUSY)**

Research has shown that Jealousy toward other people's modes and patterns of consumption can often lead to normative conformity (Fisher and Price, 1997). In a collectivistic society, people normally pay much closer attention to what others around them are doing (Triandis, 1995) and, therefore, have a higher tendency towards envy or jealousy of other individuals.

For instance, when planning for wedding ceremonies, some parents reveal their inner jealousy towards their relatives or friends and may say things like, '*I don't want the wedding of my daughter or son to be any less than the wedding of her or his cousin such and such*'. Fulfilling such social-psychological impulses often leads to wasting huge sums of cash and, as in most cases, borrowing money on ceremonies that may only last for a few hours but leaving the grooms with debts that may last for years to come (Al-Khaleej, 12/7/2003).

Normally, when consumption is motivated by jealousy, the consumers are likely to be trying to send a message that they are not less privileged and are equally capable of buying and displaying goods that reveal status regardless of their actual need or even



financial affordability (De Mooij, 2004). This became evident when I asked one of my informants about why he thought that he was particularly keen on building a villa that was of equal size to that of his close relatives;

*My two brothers and cousin are not more affluent than I am, why should I live in a smaller house than theirs when I can afford living in one that is as big as theirs.*

#### 6.4.2.4 INFORMATIONAL CONFORMITY

Informational conformity is a more subtle type of conformity trigger and perhaps somewhat less pervasive than the above discussed normative conformity. It is induced by information, especially when reality is unclear and consumption choices require special technical knowledge. Hogan (2001: 44) argues that;

*Individuals are likely to turn to other people in order to see what they want, on the assumption that what others want must be what would make those individuals and themselves happy as well. This is not, most often, a conscious process of inference, but a more immediate, imitative response..... Individuals may have no genuine desire, even a false one, for a particular car, television, or home. Yet they may pursue these due to a sort of spontaneous imitation of their neighbors, or families on television, who have these things and appear to be happier. [emphasis added]*

Informational influence can 'result from actively seeking information from others as well as passively observing others' (Clark and Goldsmith, 2005: 294) For example, Abou-Auda (2002), in a recent study on medication purchase and use in the Arab Gulf states, found that, despite free and prompt access to specialist physicians, nearly half (43.5 per cent) of the household surveyed have said that they had purchased and used a wide range of drug products within the past six months based on the advice of friends



and relatives<sup>91</sup>. This as he concludes was one of the main factors that had led to wasting of millions of dollars in discarded medications.

#### 6.4.2.4.1 OTHERS KNOW BETTER

The vast majority (94 per cent) of the new middle-class homeowners have never been involved in house design prior to their current home, therefore, they often lack basic design knowledge and exposure. Moreover, as indicated by most consultants involved in the private home design process, a considerable proportion of their clients still lack comprehension of room dimensions and spaces. To overcome such a problem some consultants use existing rooms in their offices physically to demonstrate the approximate sizes to their somewhat confused clients, while other clients may use measuring tapes to have a more precise idea about the proposed room dimensions and measurements. Moreover, the lack of any form of basic training and orientation programmes on private housing design principles helps in encouraging a reasonably large number of homeowners to follow the housing consumption patterns of others under the illusion that what may be good for others must be also good for them. When asked why he decided to build a two floor villa, an informant from the low-middle owner-to-be group answered that;

*Most of my friends are building two floor homes and I tend to think what they are doing is the right thing for me also. What do you think?*

And another participant from the mid-middle segment stated that;

*I have never been involved in designing a house before; I believe that my relatives who have already built before me are quite happy with their homes. They are knowledgeable in this and I am very keen to have a house like theirs.*

Despite lacking technical expertise, most lay people who are approached for advice on home design welcome the idea and happily offer their opinions on all matters related to

---

<sup>91</sup> Unlike in the UK and other European countries, much wider ranges of medications including all types of anti-biotic could be bought from private chemists without authorized doctors' prescriptions.



design and construction. Unfortunately, for cultural reasons, most people do not want to look as if they are not familiar or well-informed about housing design especially when they had gone through the design and construction of their own homes. Therefore, they do not hesitate to give advice which in most cases may not suit other people's housing needs. The trouble is that, in this sort of culture, even if someone tried to refrain from offering technical advice related to home design, he or she may risk being perceived as not being cooperative.

The design consultants on the other hand complain that most of their clients involve too many inexperienced people in the design process by seeking their advice and views on the design of their homes at different stages. According to almost all design consultants, the involvements of other individuals seem to have major influences on the final design layouts.

## **6.5 THE ROLE OF WOMEN (wives)**

Socioeconomic data presented in chapter five has shown that 93 per cent of all those who were in the process of becoming homeowners were married. All married individuals among the owner-to-be sample have revealed that they have actively involved their wives in the design of their homes. This is a new trend that has only emerged in the past decade. Ten to fifteen years ago, a decision such as the design and layout of a family's home was considered as being entirely a man's job and was exclusively handled by men without any real involvement of the wives. But, with the spread of education and changes in social values and gender roles in society, women have become more involved in most household decision making. Another reason for increasing involvement of women in home design is because some of them who work and have personal income may financially contribute in construction or furnishing cost. Therefore, they have more reasons to become interested in participating in decisions related to home design.

Studies conducted in western cultures have revealed that, in general women tend to have higher levels of aspiration for consumption of material goods (Ferguson and Crowley, 1997). Additionally, women show much greater susceptibility to public shame than men (Bryce and Olney, 1991). As a result, women are more inclined to



use shame-avoidance techniques as a means for evaluating and comparing themselves with others around them and, thus, drive their general desire for consumption higher than their male counterparts.

The overwhelming majority of individual stakeholders (i.e. owners, consultants and government officials) interviewed for the purpose of this study have confirmed the significant roles women play in the overall rise in both the size and home-finishing quality of middle-class dwellings. For instance, a manager of one of the private consultants stated that at least four out of ten of his clients usually decide to substitute the agreed home-finishing materials (e.g. ceramic, paint, floor marble, staircase handrails, lighting fixtures, bathroom fittings, doors, etc.) during the construction stage for more expensive and ostentatious ones at the request of their wives (Al-Bayan, 3/11/1999). He went to say that, when it comes to home construction, women do not concern themselves at all with the cost or actual household needs, all they want is a fancy and spacious home. However, this perception about women's over-consumption and improvidence in UAE society goes beyond just housing consumption to almost all other material goods.

In line with the above argument, an individual from the owner-to-be group revealed that the reason why he decided to build what he called '*a large two storey villa*' is because his wife insisted on it. During the design process, she went on telling him on several occasions that;

*As a man, he did not have anything to worry about, since he would be outside the house most of the day. But, she is the one who has to deal with the whole thing. I want a nice house like everybody else so I can proudly invite my friends and relatives over, she said.*

Another person who was involved in the design of his home spoke of the influence of his wife on both the design details and size of their future home.



*Every time my wife visits a house of a relative or a friend or looks at a home decoration magazine<sup>92</sup>, she would come up with some new design idea for our future house. We are now in our fifth month and both the design and the size of our villa has changed more than six times.*

Despite the above assumption about the role of women (namely wives) in the overall increase of the sizes of middle-class dwellings, our data have shown that the difference between the size of dwellings of those who were married and said that they had involved their wives in the design of their homes and those who were single and, thus, had no wives to involve was statistically not significant. This result indicates that the involvement of wives in design did not necessarily play any direct role in the overall increase in middle-class dwelling size, contrary to what most participants had suggested.

Because of cultural factors, access to women is highly restrictive in UAE society, therefore, it was not possible in this study to interview women separately as part of the investigation in order to have a better understanding of their view points. However, studying the role and influence of women in private housing design within the Dubai study context is a topic that can be recommended for future research.

## **6.6 THE INFLUENCE OF RICHER NEIGHBOURS' HOMES**

The point has been made in chapter three that Dubai Government's housing policy includes the granting of rich high-income households large plots within the middle-class neighborhoods. On the wider strategic context, this policy has many benefits as it helps in reducing spatial segregation between the middle and upper income groups in the society. However, when high-income families are granted plots near the homes of others who are less affluent, and start building huge and very elaborate mansion-like villas, there is a likelihood that those less affluent neighbours feel that they need to push up the sizes of their homes or otherwise risk their homes looking too small, which is not a very desirable thing for most households. While it is extremely difficult to measure or prove the effect and magnitude of such an influence, it has become very

---

<sup>92</sup> in the past ten years, the number of national, regional and international home decoration magazines available in local bookshops have burgeoned from only four to more than 30.



common to hear derogatory comments about the middle-class villas that are built close to huge upper-class mansions. One comment that is frequently repeated is; 'oh dear, this villa looks like a service block for the big mansion next to it. I wonder how the poor man feels about his home now that this gigantic home is built next to him'.

**Plate 6.8 An example of a high-income villa built within a middle-income district**



*Source: Fieldwork 2003-2004*

Upper-class families normally build homes that are at least twice as large as those built by the middle-class. See plate 6.8. The average size of upper class homes that existed in the neighbourhoods where the surveys were conducted was around 1,000 square metres, however, some of them were as large as 2,000 square metres. The presence of large and extravagant upper-class homes in what is delineated as predominantly middle-class areas seems to make some homeowners feel inferior and vulnerable particularly those who are close neighbours. For instance, one such owner from the mid-middle group expressed his extreme discontent about having a neighbour who had built a home that was much larger than what he can afford.



*I don't know why the Municipality keeps allocating huge plots to rich folks who have no difficulty in building big mansions so close to our homes? No matter how big a house I build it will still look like a little hut.*

Nevertheless, it is important to highlight that not all homeowners are unhappy about this. As the researcher had come across some who viewed this as a positive matter and said the government should encourage such a policy. The existence of large and highly expensive homes in the neighbourhood is seen by some as an element that brings more positive economic and visual values to their surroundings and they would probably welcome such an idea.

## **6.7 THE ROLE OF DESIGN CONSULTANTS**

An earlier discussion in chapter three has clearly demonstrated the important roles consultancy offices play in the housing development process. Most important is their responsibility for the design of each individual private dwelling unit. There is a general opinion among those involved in the housing sector that many of the consultants participating in the design and construction of single-household villas play some role in the general increase in the sizes of dwellings being built by middle-class households in Dubai. Although the precise effect of their role is difficult to confirm, numerous discussions with consultants and officials from the Buildings and Housing Department have revealed that those who actually do recommend larger design layouts are doing so for two reasons:

(1) They attempt to maximize their financial return from each project. Because they are normally paid on a percentage basis of the total project cost, it is widely believed that a considerable proportion of consultants suggest design proposals that have numerous and large spaces in most cases much more than the households' actual needs. Because such practices are viewed as unethical and they contradict the essential role of safeguarding the interest of their clients by providing fair professional advice, most consultants interviewed have quite understandably denied such practices. However, during one interview with representatives of a consultancy firm which was involved in the design of middle-class private housing the researcher had managed to capture a



candid and frank confession from a senior architect who was working for the firm that had designed and built more than 100 private villas in the last 6 years.

*As a private investor I consider my self like a shop owner. My priority is to make maximum profit from each project. You know that the bigger the house the more it costs and the more it costs the higher my fees would be. That is why I always show my clients plans in which I will try to convince them that spaces which are bigger are more comfortable... And that's why sometimes when they [clients] ask me for example for a coverage area of 400 square metres, I do my best to drag them up to 500 square metres or even more ..... You have to realize, we are sitting in a market, and we have no option but to increase our return from each project as much as possible of course.*

Architects are also thought to be using seductively rendered examples of drawings and perspectives of large villas. Such techniques often do impress the clients as they are shown series of what some architects call the stunning examples of 'conspicuously large villas'. Moreover, those consultants quite often take advantage of the highly flexible home construction budgeting norm that is followed by a great proportion of middle-class clients (refer to earlier discussion in this chapter). A number of the informants among the design consultants have revealed that it is common for most architects involved in designing single villas intentionally to start by giving their clients much lower cost estimates for their preferred designs until they sign the appointment contract with them after which they let the clients gradually realize that the actual cost may exceed those early estimates. For further details on this issue see Al-Bayan (3/11/1999).

(2) Seventy per cent of the consultants interviewed for this study have admitted that they normally start by presenting sketch design proposals which include relatively numerous and large spaces. The reason for doing so they claimed is because they want to avoid being blamed later by their clients for designing small villas. Most interviewed consultants spoke of previous cases where they had to add or increase the size of rooms after designs were approved by the Municipality and in some instance even after construction started. Such circumstances create a number of technical and



financial problems and above all delay the project. It seems from the comments made by most architects that they firmly believe that middle-class clients who use government interest-free loans almost always prefer to have large spaces and it is normal that they propose larger and more rooms. In their view, they are only doing that to fulfil the anticipated wishes of their clients and, if they do the opposite or try to challenge those wishes, they risk losing their clients to other consultants who would happily offer them what they want. To back up such a claim one consultant went on to say:

*I have heard of tens of stories where clients have gotten angry about their rooms being small, but I have not heard of even one case where a client complained to a consultant that he designed him rooms that were too big.*

As things stand now, there are major language and cultural barriers between the local clients and their foreign architects who are involved in designing their custom-designed homes. It appears that a considerable proportion of clients don't entirely believe that the consultants genuinely understand their wishes and, therefore, there is very little room for substantive design-oriented discussion. During my fieldwork investigations, I came across a number of clients who expressed their negative views about the performance of their consultants. Comments such as '*my consultant doesn't have any creative ideas, I designed my house after long consultations with my friends and relatives*', have become very common among those who are involved in designing their homes.

It seems that many of the clients treat the design architects more or less as draughtsmen rather than true designers who should, along with their clients, conceptualize and then go through the process of developing a housing layout that best suits the budget and, more importantly, the housing needs and requirements of the client. In Dubai as is the case in most other Emirates, the clients are also suspicious about the consultants' integrity as there is a widespread belief that most consultants involved in small scale projects (e.g. individual villas) quite often strike illegal deals under the table with the contractors against the interest of the client by, for instance, approving cheaper and substandard building materials without the prior knowledge and approval of their clients (Al-Bayan, 4/11/1999). All those negative preconceptions and cultural and linguistic barriers have helped in making the relationship between the architects and their clients rather



superficial and not supportive of the introduction of design concepts that are well suited for the use and needs of their clients. Because as we have argued above, most of the clients do not believe that they can get the best advice from their consultants, they often actively turn to other people around them for opinions on the design of their homes and this, sometimes, can have detrimental effects, specially that most lay people lack the basic understanding of housing design principles.

## 6.8 SUMMARY

This chapter has investigated the most relevant and influential factors behind the recent surge in the contemporary dwelling sizes and the consequent sharp increase in the rates of housing consumption. Findings of this chapter show that the government's provision of generous housing subsidies particularly in the form of large interest-free soft loans is the most important factors leading to increased housing consumption among middle-income households in Dubai Emirate. Government's assumption that all middle-class households are not able to house themselves is entirely inaccurate, as two thirds of the owners and nearly the same number of owners-to-be have indicated that even if there was no interest-free loan programme from the government, they would have gone ahead and built their dwellings. However, the majority have said that they would have built smaller homes than the one built with the loan. A small percentage particularly from the high-middle segment confirmed that without government loan they could manage building large dwellings similar to the one built with the loan.

Moreover, with provision of only 50% of current loan value, even more of owners-to-be (i.e., about three quarters) would have managed to build their dwellings, though smaller. Such findings can lead to three main conclusions, firstly, generous interest-free soft loans lead to major distortion in housing consumption. Secondly, the majority of the loan recipients may only need partial support from the government e.g., only 50% of the loan value in order to be able to house themselves. Thirdly, some of the target population particularly those from the high-middle segment have the full ability to house themselves without any help from the government. However, because the subsidised loan is available to all middle-class, everyone can take advantage of it regardless of his/ her actual need.



In addition to the impact of government interest-free loan, there are several other supporting factors that contribute to the rise in the housing consumption. Private banks which provide high-interest personal loans have been in the last few years playing significant roles in providing additional cash which in turn allow loans recipients to build much larger dwellings than they can with only government loan and personal resources.

Social and cultural influences also play highly significant roles in pushing up the rates of housing consumption among middle-class households in Dubai. The desire for social prestige and distinction mostly among high-middle population and the countervailing motives for conformity and similarity to social groups mostly within the low and mid-middle segments fuel the current trends of high consumption rates. Thus, within contemporary middle-class culture, housing and particularly its size is perceived highly as a status good.

Finally, the private housing design consultants play some tangible role in the increased rates of housing consumption as many of them encourage their clients to design and build larger homes which will guarantee them more return in design and supervision fees.



**Chapter 7:**  
**POLICY IMPLICATIONS OF HIGH RATES OF**  
**HOUSING CONSUMPTION & TARGET GROUP**  
**PREFERENCES**



## **7.1 INTRODUCTION**

Analysis in the previous chapter has clearly shown that poorly targeted and highly generous housing subsidies in the form of large amount interest-free housing loans and granting of free of charge serviced residential plots offered by both the Dubai local government and the UAE federal government throughout the past fifteen years have played the most significant role in the recent surge in the rates of housing consumption among middle-class national households in Dubai Emirate. Moreover, the discussion in chapter three had highlighted that current tenure regulations set by the government only allows for the right of use and strictly ban the sale or renting of the dwelling units that are acquired through any of the aforementioned government subsidies.

The aim of this chapter is therefore, systematically to identify and assess the various implications of the existing trend of high housing space consumption among the target population. The assessment will address the initial capital cost of housing provision for the three income sub-groups in order to test their levels of economic affordability and its future sustainability. Moreover, the evaluation will examine the ongoing operation and running costs from the perspective of the homeowners. The chapter also aims to assess the merit of the current subsidy policy from an overall equity perspective particularly under the constrained financing resources available to the two existing state-run housing programmes i.e., the PHFS and SZHP. It will shed light on the current housing space utilization patterns and adjustment preferences of the target groups in the hope of developing a more responsive, efficient and equitable housing supply and consumption policy framework. Finally, it will introduce and assess the willingness of the target population of accepting an alternative method of housing provision namely the ready-built approach.

## **7.2 HIGH & RISING COST OF HOUSING PROVISION**

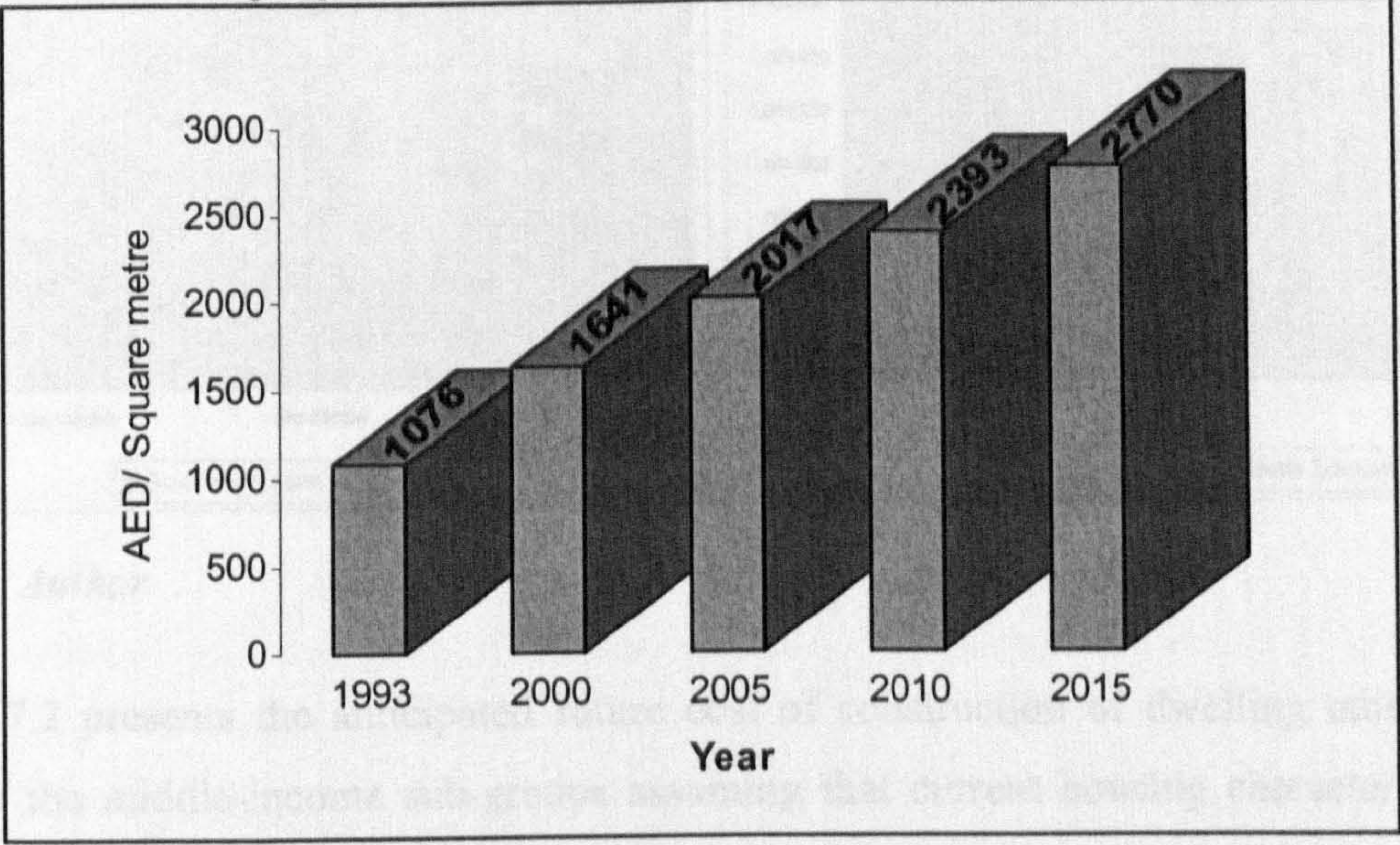
During the past ten years, construction cost in the UAE has witnessed substantial increases. Economic forecast studies carried out by a number construction economists in the country have concluded that construction cost is bound to continue rising at similar or even slightly higher growth rates than those experienced in the previous five



years. (Gulf News, 21/4/2006; Al-Khaleej, 18/5/2006). Moreover, this hike in construction cost is anticipated to continue well into the coming decade. National, regional and international economic factors are believed to continue driving the prices higher<sup>93</sup>.

Figure 7.1 The projected cost of dwelling unit construction for years 2000 and 2015

**Figure 7.1 The average per square metre construction cost of middle-income single-household dwelling unit in Dubai Emirate- past trends and future projections- 1993, 2000, 2005, 2010 & 2015**



*Source: 1993, 2000 and 2005 are based on a sample survey conducted by the researcher. Future projection is also by the researcher.*

Figure 7.1 shows the historical trends and future projection of the average per square metre cost of construction of middle-income single-household dwelling units in Dubai Emirate. In 1993, when the PHFS loan was first initiated, the average cost of building a square metre of single-household villa type dwelling was AED 1,076 (\$293). By year 2000, the price had reached AED 1,641 (\$447). The cost of construction continued to rise, and by 2005 the cost of an average square metre reached AED 2017 (\$550).

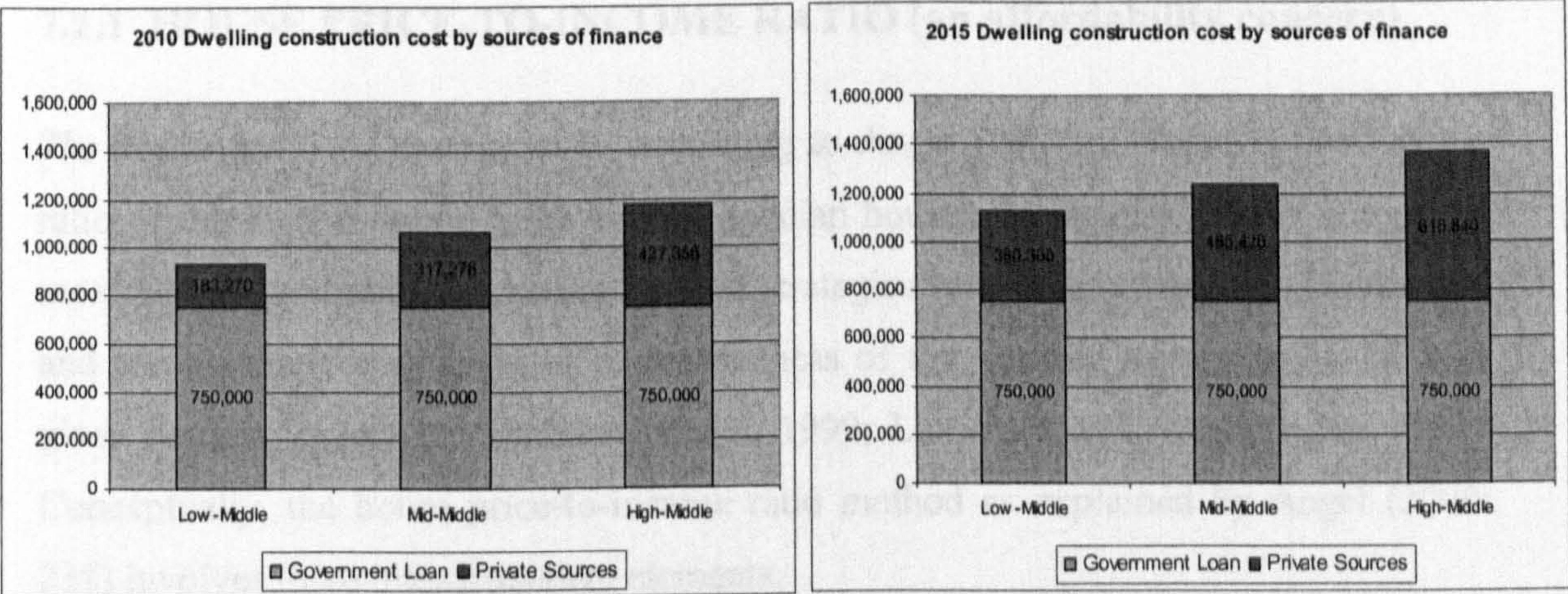
If as anticipated, past inflation rates in the construction market continue and similar construction standards are maintained, the average cost of construction for each square metre of single-household housing unit in Dubai Emirate is set to further escalate and hit record prices at AED 2,393 (\$625) by year 2010 and AED 2,770 (\$755) by 2015.

<sup>93</sup> Economic growth and high demand for fuel and construction materials in China and India in addition to a major boom in construction in the UAE and throughout the Gulf region will drive construction prices to new peaks (Al-Bayan, 11/5/2006).



Therefore, if current housing consumption patterns chosen by middle-income households are to be sustained in the foreseeable future, substantially higher capital investments will need to be made by both the government and individual homeowners.

Figure 7.2 The projected cost of dwelling unit construction for years 2010 and 2015



Source: Author

Figure 7.2 presents the anticipated future cost of construction of dwelling units for each of the middle-income sub-groups assuming that current housing characteristics and consumption parameters are maintained. For instance, by 2010 the cost of a median Low-Middle income dwelling will be in excess of AED 933,000 and by 2015 the same dwelling will cost nearly 1.1 million. Similarly, the cost of building a median dwelling unit for a Mid-Middle household is expected to reach about 1.1 million in 2010 and 1.24 million in 2015. Finally, the median cost of construction of a High-Middle income dwelling will reach nearly 1.2 million in 2010 and about 1.4 million in 2015.

Unless major steps are taken early on to deal with the real causes of high and rising cost of housing construction particularly those related to excessive rates of housing consumption, many middle-income households will find it more and more difficult to secure their access to homeownership. Furthermore, such high housing prices may very well become instrumental in intensifying public pressure on the government to raise the value of the interest-free housing loan similar to those which led to the recent 50 per cent increase in September 2004. With 51 per cent of the population being



currently under the age of 20 years<sup>94</sup>, it is anticipated that demand for middle-class housing loan subsidies will sharply increase and exceed current annual rate of growth which ultimately means that much more money will be required to satisfy the growing demand..

7.2.1 HOUSE PRICE-TO-INCOME RATIO (an affordability concern)

*The house price-to- income ratio*, according to Angel (2000: 234) is “defined as the ratio of the median house price and the median household income” and is one of the most widely used and accepted method of strategically assessing housing affordability and testing the overall level of responsiveness of the housing supply policy in any given housing policy environment (Mayo, 1999; Linneman and Megbolugbe, 1992). Conceptually, the house price-to-income ratio method as explained by Angel (2000: 232) involves three interdependent elements;

- (1) the quality and standards of housing available or preferred by the consuming households.*
- (2) the price of housing.*
- (3) the disposable income of the households seeking to buy housing.*

Thus, simply when house price-to-income ratios are high, the consumption of adequate or socially preferred housing becomes less affordable until the ratio is brought down through either proportionate improvement in income, major reduction in housing standards, quality and expectations or major reduction in price and cost of housing.

Table 7.1 Median house price-to- income ratio for 2002

Cost (full)	Low-Middle	Mid-Middle	High-middle
Construction+ Serviced Plot+ +Consultancy fee	12.6	7.1	4.9

Source: fieldwork, 2003-2004

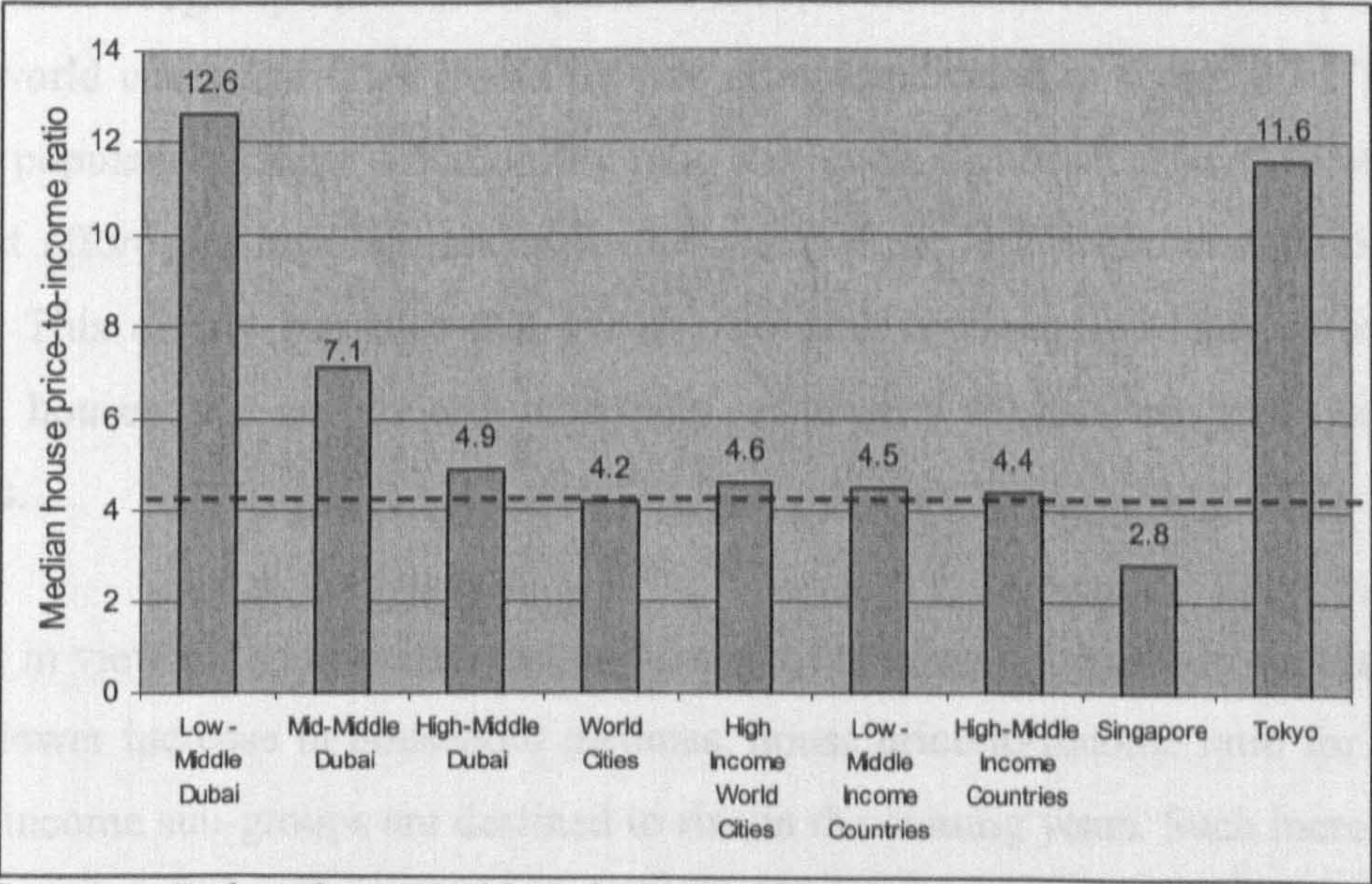
<sup>94</sup> Preliminary results from the 2005 UAE Population and Building Census (AlBayan, 31/7/2006).



Table 7.1 presents the findings of the house price-to-income ratio for the three middle-income sub-groups. This figures include the full and *real cost* of housing acquisition that covers the cost of the serviced land plot which is until now granted free of any charges, full house construction and consultant design and supervision fees. The data shows a significant variation among the three sub-groups. Unsurprisingly, the Low-Middle households have an excessively high house price-to-income ratio with a staggering 12.6. Such figures could very well suggest that most households in the Low-Middle group may in fact be asset-rich and income-poor resulting directly from the poorly targeted and blanket housing land and construction financing subsidy policy adopted by the government authorities. The house price-to-income ratio for the Mid-Middle households on the other hand was lower at 7.1 while the High-Middle households had a much smaller and affordable ratio of 4.9.

To make some sense of those house price-to- income ratio data, figure 7.3 places the same findings for the three study Middle-income subgroups in an internationally comparative context of a number of selected world economic groups and regions that have high and comparable income per capita to that of Dubai and from middle income regions for relative comparison.

**Figure 7.3 Comparison of median house price-to-income for selected world regions**



Sources: Dubai data- Fieldwork, 2003-2004. Other regions and cities data - Angel, S. (2000: 367).



As can be seen from the figure, the ratios of the selected high-income cities range between 2.8 at the lowest as in the case of Singapore to the highest of 11.6 as in Tokyo. The average ratio for high-income world cities was recorded at 4.6, world cities had 4.2 ratio, high-middle income countries with a ratio of 4.4 and finally the low-middle countries recorded an average ratio of 4.5.

At a ratio of 4.9, only the High-Middle subgroup had an affordability index that falls within the global norms of different economic and income regions. For instance, our data revealed that the Dubai High-Middle income population had a house price-to-income ratio that is close to that reported for the high-middle income countries of the world. Moreover, on average, the cost of dwelling relative to income for our High-Middle group is slightly higher than in the world's high income cities. This comparison broadly shows an equilibrium between the housing consumption pattern and cost of housing relative to the disposable income for this study group.

At a house price-to-income ratio of 7.1, the Mid-Middle group has a cost of housing acquisition relative to income that exceeds the average ratios of all world income regions. For example, it surpasses the average world cities by a ratio of 2.9 and by about 2.3 compared to world high income cities.

Low-Middle subgroup has a house price-to-income ratio that is more than double that of the world cities and other world income groups indicated in figure 3.7. The low-Middle population has an affordability ratio that even exceeds Tokyo City which has the least affordable housing market in the cities of the high-income industrial world cities<sup>95</sup>. This clearly indicates that existing housing consumption rates among Low-Middle households are indeed extremely expensive relative to their disposable incomes.

Clearly, in view of the expected rise in the cost of housing construction coupled with a much slower increase in household incomes, house price-to-income ratio for all three middle income sub-groups are destined to rise in the coming years. Such increases will

---

<sup>95</sup> Exceptionally high housing price in major Japanese cities such as Tokyo is mainly attributed to two factors (1) very expensive land values (Kanemoto, 1997) and (2) high cost of construction (Angel, 2000).



further prove that existing housing consumption trends by particularly the Low-Middle and to some degree the Mid-Middle homeowners would be unsustainable if public subsidies are dramatically reduced.

### **7.3 CONSIDERATION OF POST-CONSTRUCTION/ OCCUPANCY COSTS**

Miles and Syagga (1987), Flanagan, et al. (1989), Bull (1993) and Sterner (2000) among many other researchers have extensively argued that the consideration of post-construction and occupancy costs on the owners and the users of residential buildings - also known as the costs of operation, and maintenance- must be viewed as an integral and one of the key determinants of the architectural and structural design decisions. Two important factors underpin this argument;

- (1) The housing operation and maintenance costs are directly and highly influenced by the basic physical characteristics of the residential buildings namely, their sizes and number of spaces and quality (i.e., durability and efficiency) of materials and finishing applied in the construction.
- (2) The potential for the reduction and efficient future operation and maintenance costs of residential buildings are the highest and most feasible during design phase.

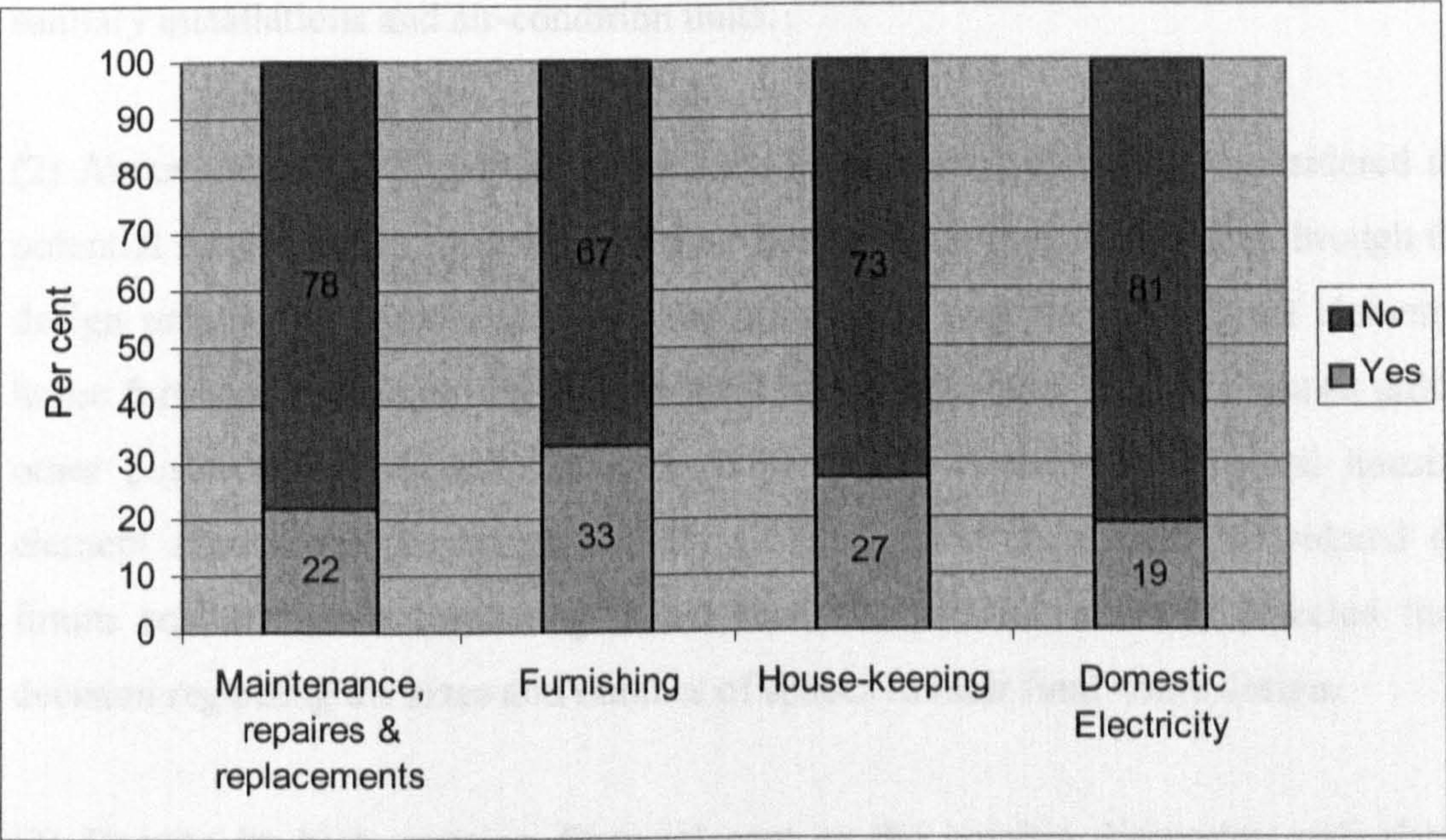
One of the main aims of this chapter is to assess the implications of high rates of space consumption among the study target population in relationship to the recurrent and ongoing costs of housing operation and maintenance. Hence, it is essential to develop an understanding about the importance and awareness of this population with regard to those future housing costs. Every participant from the owner-to-be informants was asked if he/ she had ever given any thoughts or considered any of the four key operational and maintenance cost elements<sup>96</sup> associated with using their future custom-designed housing units during the design process of their private homes.

---

<sup>96</sup> The four most significant and relevant housing operation and maintenance cost elements in this case include, (1) costs of house maintenance, repairs and replacements (2) costs of furnishing and refurnishing (3) costs of housekeeping services, and (4) costs of domestic electricity.



**Figure 7.4 While you were designing your house, have you ever thought about or considered any of the following post-construction/ occupancy costs**



*Source: fieldwork, 2003-2004*

Figure 7.4 presents the overall summary of the responses for each of the four major predetermined post-occupancy cost elements. The data shows very clearly that the greater majority of the owner-to-be respondents had never considered such important housing cost issues while designing their future homes and determining important characteristics of their private dwellings, particularly in relationship to the overall built up area and number of rooms of various types.

(1) Generally speaking, the issue of housing maintenance receives very little attention from both individual homeowners and organizations in the developing world. Al-Mansoori (1997) has argued that a similar trend exists in the Arab Gulf states including the UAE. As for the case of this study group, less than a quarter (22 %) of the respondents indicated that, at the time when they were designing and setting specifications for their future dwellings, they were aware of the importance of reducing future undue burdens resulting from maintenance, repairs and replacements. When asked if their awareness of the future maintenance, repair and replacement costs had any effect on their decision on the size and number of spaces in the dwelling they ultimately chose, a small minority of only 11% replied positively. The remaining respondents have indicated that their awareness of this issue was mainly applied in selecting high quality and durable building materials, fittings and fixtures



such as floor and wall ceramics, electrical wirings, wash basin, shower and bath mixers, window aluminum frames, doors, interior and exterior paints, drainage pipes, sanitary installations and air-condition units.

(2) About a third (33%) of the respondents mentioned that they had considered the potential future cost of furnishing of their homes while they were going through the design process. In comparison with the other three post-occupancy cost elements, home furnishing received the highest level of consideration. This is because unlike other post-occupancy costs, furniture is the most visually experienced housing element after home construction. Only 12 per cent of those who considered the future cost of home furnishing stated that this had in some way affected their decision regarding the sizes and number of spaces in their final home design.

(3) Despite its high ongoing financial cost as the coming discussion will show, domestic house-keeping requirement has received a relatively low level of consideration. Only about one quarter (27%) indicated that they had considered or thought about the potential cost of house-keeping while they were involved in designing their homes. However, only a tiny 10 per cent of them confirmed that their consideration for future house-keeping cost had affected their decisions on the sizes and number of spaces in their dwellings.

(4) Owing to the extremely hot climatic conditions, all buildings particularly residential and commercial units depend heavily on electricity-operated air-conditioners for cooling the interiors of those units. Therefore, payments of monthly electricity bills are considered among the key housing operational costs in the UAE particularly during the eight month summer heat. Surprisingly, electricity cost was the least considered among the owner-to-be respondents with only 19 per cent indicating that they had considered it while undergoing home design. This is perhaps because the Dubai Government still partially subsidizes electricity consumption for the national consumers and, therefore, the effect of the real cost has not yet been realised by those consumers. Only about 10 per cent of those who considered the recurrent cost of domestic electricity consumption have mentioned that this had some effect on the overall built-up area of their dwellings.



The generally low levels of awareness and consideration for important post-occupancy housing cost elements during design stage on behalf of the owner-to-be study group can be attributed to three major factors.

**Firstly**, because the overwhelming majority of the perspective homeowners have never had or used large dwelling units and never been involved in the housing design process, they mostly lack experience and somewhat technical knowledge about the relationship between housing design future operational and running cost issues. This became evident when several participants particularly from the low-middle and mid-middle owner-to-be group made the following statement; 'this is my first time to design and build a house. Without any previous experience or someone explaining to me beforehand, how could I think of such complex and hidden future housing costs?'

Another explanation that was frequently repeated by a number of informants is; 'no one has ever brought up this issue to my attention. My main and only concern was to design and build a perfect and an ideal home for my family like everybody else in the community'.

**Secondly**, during the series of semi-structured interviews with private consultancy offices, it was openly revealed that nearly all the consultants responsible for designing private dwellings avoid discussing this issue with their clients. The reason they claim is because their clients have no interest in such an issue, so why should they? However, it should be once again clarified that discussing future operational and housing maintenance costs does not necessarily serve the commercial interest of private consultants which often aims at increasing the value of each project investment rather than exploring opportunities to reduce it.

**Thirdly**, so far, none of the governmental or professional housing and construction institutions have provided any form of training, orientation or awareness programmes on the issue private housing design. For instance, the two major governmental housing financing institutions (i.e., PHFS and SZHP) have only focused on managing and processing the provision and collection of the interest-free loans and have not considered becoming involved in providing awareness and



advice to individuals who have been granted housing loans. The UAE Society of Engineers (UAESE) is the country’s only professional institution that brings together all engineers and architects working in both the private and public sectors. Despite being regularly active in offering courses and seminars on various building design and construction issues, the UAESE has not yet carried out any training on the issue of nationals’ private home design to either practicing architects nor the potential homeowners.

7.3.1 HOUSING CONSUMPTION AND HOUSEKEEPING REQUIREMENTS AND COSTS

Data from the owners-occupant survey reveals that 83 per cent of all middle-class households now employ two house-maids to look after their houses<sup>97</sup>.

Plate 7.1 (a) 83 per cent of all middle- class households are now employing two house-maids to look after their villas (b) a house-maid at work in a middle-class home in Dubai.



Source: Author, 2003

More than two-thirds (69 per cent) of all low-middle income group have two and the rest have only one with an overall mean of 1.69 maids per dwelling. 85 per cent of mid-middle households have two maids and the remaining 15 per cent have only one with a mean of 1.85 maids per dwelling. Finally, the full 100 per cent of the high-middle income group have two maids with a mean of 2 maids per dwelling.

<sup>97</sup> By the end of 1980s (i.e., by the end of the transition housing phase discussed in chapter three), most middle-income household had either one or no domestic servants (Emirates Today, 15/3/2006).



**Table 7.2 Relationship between rates of housing consumption and number of hired full-time housemaids**

	Mean floor space per Person (sq. m.)	Mean number of maids per dwelling unit
Low- Middle	79.6	1.69
Mid-Middle	91	1.85
High-Middle	100.4	2.0

*Source: Fieldwork, 2003-2004*

Table 7.2 shows the relationship between the overall rate of housing consumption and the mean number of domestic servants actually hired to look after dwelling units for each income sub-group at the time when the survey was conducted. The findings clearly indicate that, on aggregate, a positive relationship exists between housing consumption rates and housekeeping requirements measured by the number of hired domestic maids. Therefore, a conclusion can be drawn from this set of data in which reliance on domestic servants within this middle-class population increases with substantial increases in the per capita housing consumption and average dwelling unit size. To illustrate, with a current mean consumption of 79.6 square metres per person, the low-middle households have a mean of 1.69 maid per dwelling. However, the mean number of domestic servants in the mid-middle and high-middle households increases to 1.85 and 2.0 respectively and in linear proportion with increases in the share of per capita housing consumption and average dwelling size.

**Cost of Housekeeping Requirements**

The overall monthly mean cost of employing each house-maid for middle-income households is AED 1,400 (\$382). This includes an average monthly salary of AED 700, a bi-annual return airline tickets from and to the home-country of the maid, personal hygiene needs, daily meals<sup>98</sup>, general clothing and work uniform, visa fees, health care, a one time AED 3,200 administrative fee<sup>99</sup> paid to the labour recruitment office that brings the house-maid into the country and of course

<sup>98</sup> Maids normally eat the from same meals prepared for the households.  
<sup>99</sup> The administrative fee is paid every time the household brings a new maid.



accommodation. This means that households with two maids are paying AED 33,600 (\$9,155) per annum<sup>100</sup> towards their housekeeping requirements, while those with one maid pay AED 16,800 (\$4,584) a year.

89 per cent of those households with two maids have confirmed that they had decided to hire two maids because of heavier domestic work load resulting from larger and much more spacious homes<sup>101</sup> than they previously had. Moreover, all households who employed two maids indicated that they would have not chosen to hire two if they were to live in considerably smaller dwellings. Only 11 per cent have responded that they hired a second maid because either the first one was not putting enough effort or that their wives do not participate in performing major domestic work either because they have full time jobs or that they have young children who need considerable care and attention.

Interestingly enough, the data from the owner-occupant survey have revealed that more than three-quarters (78%) of households with two maids did not anticipate the need to hire a second maid until after they had actually moved and lived in their homes. One informant from the mid-middle owner-occupant group made this point clear by stating that,

*Before moving into our new villa, we used to live in a small rented flat that we could manage without relying on maids, however, after moving and owing to the large size villa we were forced to hire two maids rather than only one. We could never imagine that, without someone explaining to us beforehand.*

Recent government statistics indicate that every year between 10 to 15 per cent of officially registered housemaids who are predominantly employed by middle-class households in Dubai Emirate run away from the homes of their employers<sup>102</sup> (Al-

---

<sup>100</sup> Note that this amount is slightly even higher than the annual income per capita in some middle-income countries such as Malaysia.

<sup>101</sup> The daily routine responsibilities of a domestic maid in a middle-class home typically include, cleaning rooms, dusting various furniture pieces, washing bathrooms, cleaning kitchens, cooking meals, washing dishes, washing clothes, ironing clothes, wiping windows, sweeping the yards and gardens plus many other miscellaneous duties.

<sup>102</sup> Run-away maids most often end up working illegally with other parties in the country. This problem according to the Head of Dubai's Department of Naturalization and Residency costs the government millions of Dirhams every year as it has to arrest, detain and finally deport them to their country of origin (Emirates Today, 31/10/2005).



Khaleej, 25/7/2005). Despite the lack of independent studies on the real causes behind the relatively high percentage of house-maids' refusal to continue working for their employers, various reports from media sources (see for instance, Al-Bayan, 12/3/2004; Gulf News, 4/8/2005) have suggested three major factors.

Firstly, heavy domestic workload and over-working are perceived as the main factor behind the noticeable rise in reported cases of servants' refusal to work in the homes of their employers. Secondly, because of financial difficulties, some households delay or refrain from paying the monthly wages of their maids, which in turn encourage those maids to leave and seek employment outside the homes of their official employers. Finally, cultural shock and homesickness particularly for the younger and less experienced maids are also noted among the reasons leading to maids' running away.

High and increased reliance on domestic foreign maids in the Dubai Emirate have often been criticised by a number of governmental and non-governmental social and community organizations, local social workers and psychologists for their negative social, economic and legal impacts on households and society at large<sup>103</sup>. However, as far as it is known to this researcher, no studies have been conducted on the causes of this emerging trend. Nevertheless, the preceding discussions have shown that the highly generous and poorly targeted housing subsidies that had enabled the construction of larger dwellings should take a major part of the blame for the recent surge in reliance on domestic foreign maids within middle-class households which make up the largest proportion of the national population in the Emirate.

### **7.3.2 DWELLING SIZE AND ELECTRICITY COSTS**

The per capita consumption of electricity in the UAE is highest in the world (Al-Iriani, 2005). Recent data shows that on the average an individual in the country consumes four times more energy than in the EU and two times more than an American consumer (Kazim, 2005). Moreover, in the UAE as well as in Dubai Emirate, recent historical records also show that the rate of electricity consumption



growth is faster than the growth rate of the economy (Al-Iriani, 2005). Interior space cooling i.e. the use air-conditioning is by and large the biggest electricity consuming element in residential units as on average it accounts for almost 75 per cent of total domestic electricity consumption (Kazim, 2005). The rate of domestic electricity consumption depends to a large extent on dwelling size, as studies in various countries have shown that consumption of electricity increases almost linearly with the size of the house (See for instance, Branch, 1993; Madlener, 1996).

**Table 7.3 Relationship between dwelling size and cost of domestic electricity consumption**

	Median Dwelling Size (sq.m)	Annual Cost of Electricity Bills (AED) <sup>104</sup>
Low-Middle	390	7,800
Mid-Middle	446	9,200
High-Middle	492	11,100

*Source: fieldwork, 2003-2004*

Table 7.3 compares dwelling size and cost of electricity consumption for the three study groups. The data on cost of electricity and dwelling size for this study population reveals similar results to previous studies. Increase in dwelling size has implied a consistent and somewhat progressive increases in the cost of electricity consumed. With a median dwelling size of 390 square metre the Low-Middle dwellings had an annual mean cost of AED 7,800 (\$2,125). The increase in the median size of dwelling of the Mid-Middle households to 446 square metre was accompanied by an increase in the annual electricity cost to AED 9,200 (\$2,500). Finally, at higher median dwelling size of 492 square metre, the High-Middle households had an annual electricity bill of AED 11,100 (\$3,025). The result from the net relationship between dwelling size and electricity cost shows a potential of

<sup>103</sup> The widespread and intensive dependence on domestic maids have been blamed for the spread of a number of social and security problems such as, petty and serious domestic crimes, loss of household privacy, negative influence on children’s linguistic skills and wasting of household resources.  
<sup>104</sup> This is based on the disclosed mean cost of electricity bills per household. They reflect a highly subsidized electricity rate. Additional 30% should be added, if national consumers were to pay full and real cost of electricity production.



an average increase of AED 21 (\$5.7) a year for every additional square metre in the dwelling<sup>105</sup>.

## 7.4 THE OVERALL PERCEIVED COST OF EXISTING HOUSING CONSUMPTION

The proportion of the composite and overall cost of housing consumption in relationship to households' disposable income is crucial for assessing the viability of housing provision policy applied to the study target population. Therefore, each participant from the owner-occupant group was asked to determine his/ her assessment in relationship to the overall cost of living in their current dwelling units. In order to have meaningful, standardised and highly representative responses from each respondent, all participants were shown a set of three cards and asked to choose one of the following answers that he/ she finds most applicable to one's condition:

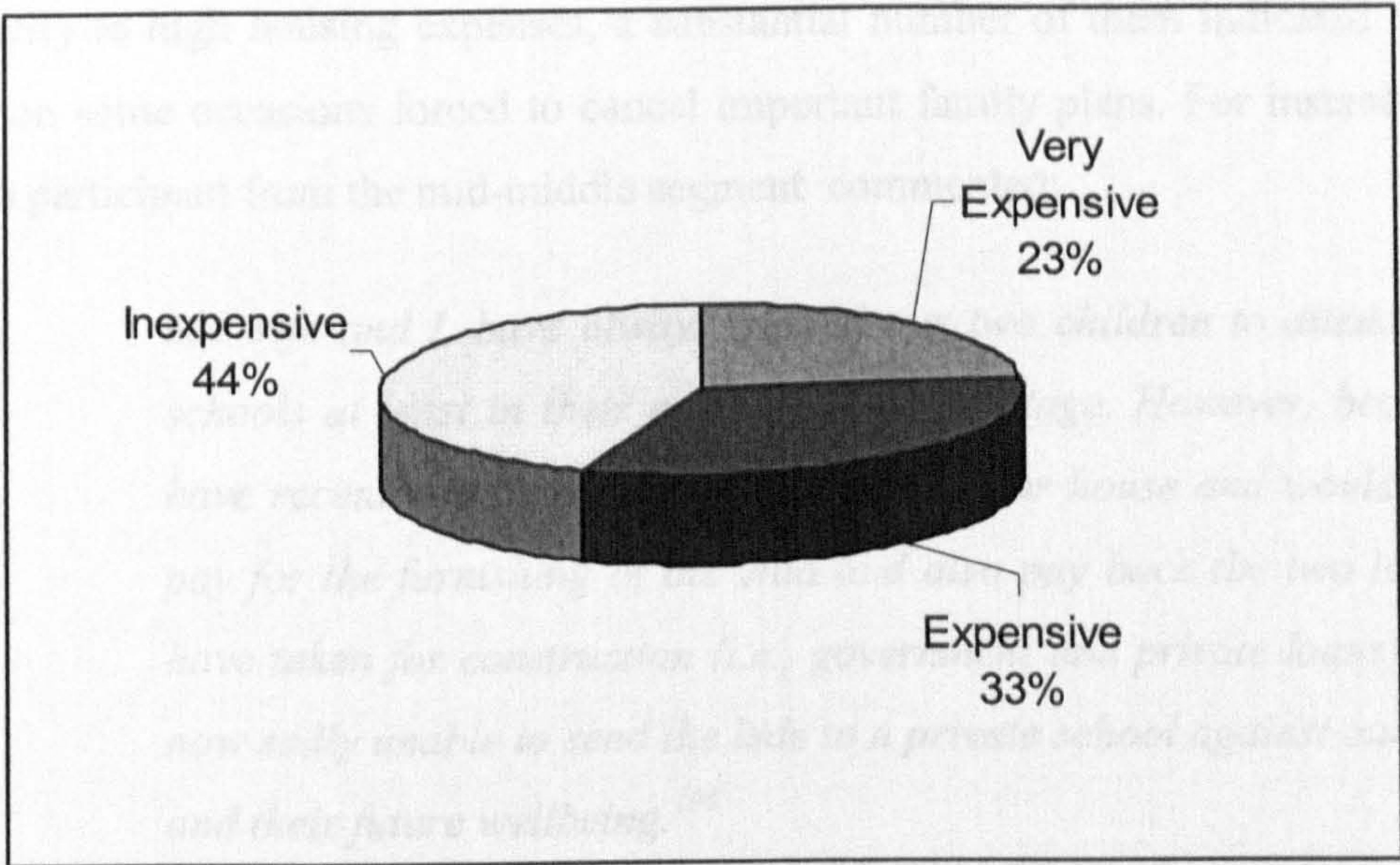
- (1) *Very Expensive*: means that the overall cost of living in the dwelling unit exerted extremely high pressure on household income which occasionally resulted in forcing them to borrow money to pay for the cost of regular operation and management of the house.
- (2) *Expensive*: indicates that the overall cost of living in the house exerted some pressure on household budget and occasionally affected the ability to spend on other important household expenses.
- (3) *Inexpensive*: reflects that the overall cost of living in the house did not exert any negative pressure on household budget and not perceived as a real hindrance to household saving.

---

<sup>105</sup> Previous international studies have revealed that, in addition to dwelling size, other factors such as dwelling age and structural conditions play important roles in rates of electricity consumption. However, because in our case dwellings are of the same age and structural conditions, other factors do not seem to have any major influence on electricity consumption.



**Figure 7.5 The perceived cost of current housing consumption**



Source: fieldwork, 2003-2004

Figure 7.5 presents a summary of the overall responses of the owner-occupant participants in relationship to their overall perceived financial cost of living in their current dwellings. The data shows that nearly one quarter (23 per cent) of the informants stated that the cost of living in their dwellings was perceived as *very expensive*. Unsurprisingly, the data has also revealed that more than two thirds (67 per cent) of those were from the low-middle income segment of households while the remaining 33 per cent came from the mid-middle. Most of the complaints about housing expenses came from both regular costs including payments of house construction and furnishing loans, expenses associated with house-maids and electricity bills and from irregular costs of paying for repair and replacement of different home items, furniture and appliances.

On the other hand, one-third (33 per cent) of the respondents revealed that the cost of living in their dwellings was perceived as *expensive*. 44 per cent of those came from the mid-middle segment, 35 per cent from the low-middle and only 21 per cent from the high-middle group. This finding was corroborated by a recent study which found that 72 per cent of all Low and Mid-Middle households in the Emirate of Dubai are not able to make any savings on their income (Alemarat Alyoum, 22/7/2006). The study indicated that high cost of housing, consumable goods and education were behind such low savings rates. Moreover, In depth interviews with a number of owner-occupant



participants had shown that in addition to the lack of ability to save any money owing primarily to high housing expenses, a substantial number of them indicated that they were on some occasions forced to cancel important family plans. For instance in one case a participant from the mid-middle segment commented;

*My wife and I, have always wanted our two children to attend private schools at least in their early educational stage. However, because we have recently finished the construction of our house and would need to pay for the furnishing of the villa and also pay back the two loans we have taken for construction (i.e., government and private loans), we are now sadly unable to send the kids to a private school against our dreams and their future wellbeing.<sup>106</sup>*

Finally, less than half (44 per cent) of the participants mentioned that they perceive the cost of living in their current dwellings as being *inexpensive* indicating no serious financial strains resulting directly from the cost of current housing consumption. As anticipated, the majority of those (79 per cent) were from the high-middle, 18 per cent comprised of the mid-middle and only a minute 3 per cent came from the low-middle group.

## 7.5 A HOME FOR A LIFE-TIME (bait al-umor)

Throughout its history and until fairly recently, homes of people of all socioeconomic backgrounds in Dubai were built and extended incrementally as extra spaces were needed. Such a housing construction approach was utilised in order to spread the cost of construction over several years and to make sure that every part of the dwelling is put to effective use. However, unlike previous times, most contemporary middle-class homes in Dubai Emirate are built as one final product. Despite the average household size of owner-to-be respondents was only 3.7, all dwellings are designed and built for accommodating households of more than double or even triple that size in anticipation of future increases and demand for space.

---

<sup>106</sup> Although the UAE federal government provides free public education to all nationals, many parents from the upper and middle-class families prefer sending their children to private schools where they are thought to receive better education, though at relatively high cost. Private school fees have lately emerged as a key household expenditure.



**Table 7.4 Do you prefer building your home in stages or all at once?**

Col %	Low-Middle (n=42)	Mid-Middle (n=93)	High-Middle (n=15)	Total (n=150)
At Once	88	92.5	93.3	91.3
In Stages	12	7.5	6.7	8.7
DF= 2                      Chi-square= 0.7847                      P.value <0.6771				

*Source: fieldwork, 2003-2004*

Table 7.4 shows that the difference between income level and preference for building one’s home as one final product or in stages is statistically not significant ( $X^2= 0.8$ ,  $p <0.6771$ ) as all three income sub-groups were almost equally and highly in favour of building at once. The data for the overall study population show that an overwhelming majority (91.3 per cent) of the households preferred building their ultimate dwellings all at once and only 9.7 per cent saw the incremental construction process as a better option. All those who said that they prefer to build in stages were referring to the building of separate external service blocks (*mulhaq*) in the future once they can secure some funds. This means that their intention for expansion may not necessarily be driven by real need for extra space, but only to satisfy a housing functional arrangement by separating the kitchen and some related uses in the services zone from the main villa unit. As earlier discussion in chapter 5 has shown, the separation of kitchen and related uses has become a popular housing arrangement among middle-class homeowners. This of course is further facilitated by the large plot sizes.

So why are so many of the households now in favour of building their ultimate homes as a final product as opposed to incremental development?

Reaching an understanding of the most significant factors that have led to the emergence of this new trend in private housing construction from the perspective of the homeowners is crucial for future policy formulation if measures are to be taken to influence this issue. Each of our owner-to-be respondents who said that they preferred to build their homes in one single stage were asked to give as many reasons as he/ she wished in an order of importance.



### 7.5.1 REASONS FOR PREFERRING TO BUILD IN ONE STAGE

(1) The most important reason which 85% of the respondents chose as their key reason was related to housing finance. The overwhelming majority fear that they may not be able to secure financial funds in the future which they can use for financing the construction of housing extensions. Availability of government-provided loans for housing construction is seen by many as a once in a life time opportunity that may not happen again. Therefore, they attempt to make full use of it and as indicated earlier, in many cases homeowners end up adding more from their own savings and even taking costly personal loans. This attitude has emerged because of government's emphasis on paying huge sums of housing finance for new home construction, while paying much less attention to financing housing extensions.

(2) The second most important factor which more than three quarters (76%) had mentioned has to do with the construction work noise, inconveniences and invasion of family privacy. Because of the use of heavy construction machinery and many building materials on-site, many of the respondents feel that, while their households are already residing in the house, they do not feel it is appropriate to have two to four months construction work for each extension. Moreover, the respondents are also concerned about the privacy of their households, especially of the females, being invaded by strange men working around the house throughout the day and for two to four months.

(3) More than half (53%) of the respondents said that they chose to build their ultimate family home in one stage because they want to avoid going through the construction process once again. The general attitude is that involvement in housing construction takes a lot of their time and energy away from family and private life. Every new home extension project involves dealing with design consultants, looking for and dealing with a contractor and selecting materials and home finishing items.

(4) Because most homeowners place much emphasis on having attractive elevation designs, one quarter of the respondents refused the incremental extensions because of their fear that this approach may damage the visual appearance of the front elevation of their homes.



(5) Less than a quarter (22%) of the respondents said that they have noticed how construction cost had risen over the last few years and, therefore, they decided to build the ultimate home before construction becomes even more expensive.

(6) Lastly, about 12% of the respondents have mentioned that their impression was that it was not technically possible to extend a villa style structure that was built with reinforced concrete. Therefore, they were persuaded that concrete structure villas can and should be built as one final product.

## **7.6 HOUSING ADJUSTMENT PREFERENCES**

Currently, the Dubai Government perceives the housing provision as a purely welfare benefit that is designed only to fulfil household consumption purposes. To safeguard this objective, the government has introduced legislations that restrict the legal selling, renting or subdividing of those dwellings that are granted through government land and interest-free housing loan subsidy system initiated more than a decade ago. This full and blanket set of restrictions on the sale and renting of publicly subsidised dwelling units includes no exceptions or special provisions, even for those who may be genuinely warranting some consideration. This indiscriminate and restrictive tenure regime adopted by the government stems out of its fears that if it opens the door for any special cases or exceptions, then it becomes difficult to control the situation. Government officials interviewed with regard to this issue expressed their concerns about two point.

(1) The number of homeowners applying for exceptions to sell or rent their homes may sharply increase if government decides to relax the strict ban on selling or renting subsidised housing.

(2) It becomes highly difficult for the concerned governmental institutions to distinguish between genuine cases requiring adjustment and those trying to abuse the generous housing subsidy system in order to gain financial benefits.

Despite the fact that all owner-occupant participants have indicated that, they are aware of their inability to legally sell or rent their dwelling units, each one of them was asked if he/ she has ever considered moving out of their current dwellings.



**Table 7.5 Have you ever considered moving out of your current dwelling unit?**

Col %	Low-Middle (n=48)	Mid-Middle (n=128)	High-Middle (n=24)	Total (n=200)
Yes	27	29.6	25	28.5
No	73	70.4	75	71.5
DF= 2                      Chi-square = 0.2801                      P. value= <0.869				

*Source: fieldwork, 2003-2004*

Table 7.5 shows that the relationship between income level and preferences for consideration of households to move out and adjust their current level of housing consumption is statistically not significant ( $X^2= 0.3$ ,  $P< 0.2801$ ) as all the three income sub-groups have nearly similar preferences for changing their dwelling units. The data for the overall owner-occupant population sample revealed that slightly over a quarter (28.5%) of the respondents disclosed their preference for adjusting their current housing consumption by expressing their desire to change their dwellings. Moreover, sixty one per cent of those who expressed their preference for moving out of their dwellings declared that they would choose to rent out their current dwellings and stay in rented apartments or villas elsewhere in the city for some years after which they may consider living again in the same dwellings. The remaining 39 per cent wished to sell or exchange their current homes with dwellings that are more compatible with their needs and preferences.

**7.6.1 ADJUSTMENT PREFERENCE AND NUMBER OF YEARS STAYING IN THE DWELLING**

**Table 7.6 Number of years in dwelling for households who considered moving**

Number of Years	Percent
1-3	69
4-6	12
7-9	19

*Source: fieldwork, 2003-2004*

Table 7.6 presents the statistical distribution of households who expressed their wish to move out of their current homes by the number of years spent in the dwelling. More



than two thirds (69%) were relatively new owners who have only spent between one to three years in their homes. This can be explained in two ways.

(1) Many young and newly formed households find their newly built homes to be much larger than their current needs and, therefore, wishing to adjust their housing consumption by moving to a smaller unit. According to one young mid-middle owner;

*Two years ago, I built this five bedroom 470 square metre villa. Since I have just recently gotten married and I only have one small child, I feel that this house is quite large for my family. It will probably be at least another ten years before we are able to fully utilize it. I am now seriously considering renting this villa and living in a small rented apartment in the city.*

(2) Some new homeowners wish to rent out their dwelling for a few years so they could use some of their rent income to pay back for the personal loans taken to cover for construction and furnishing costs.

The data also shows that 12 per cent of those who expressed their wish to move out of their current dwellings spent between four to six years. Finally, a significant 19 percent of them spent between seven to nine years in the house. Most of them were from more mature and older households whom their children had married and permanently moved out of the family homes. The majority of households in this group were in favour of selling or exchanging their current dwellings which by now exceed their needs with more suitable ones.

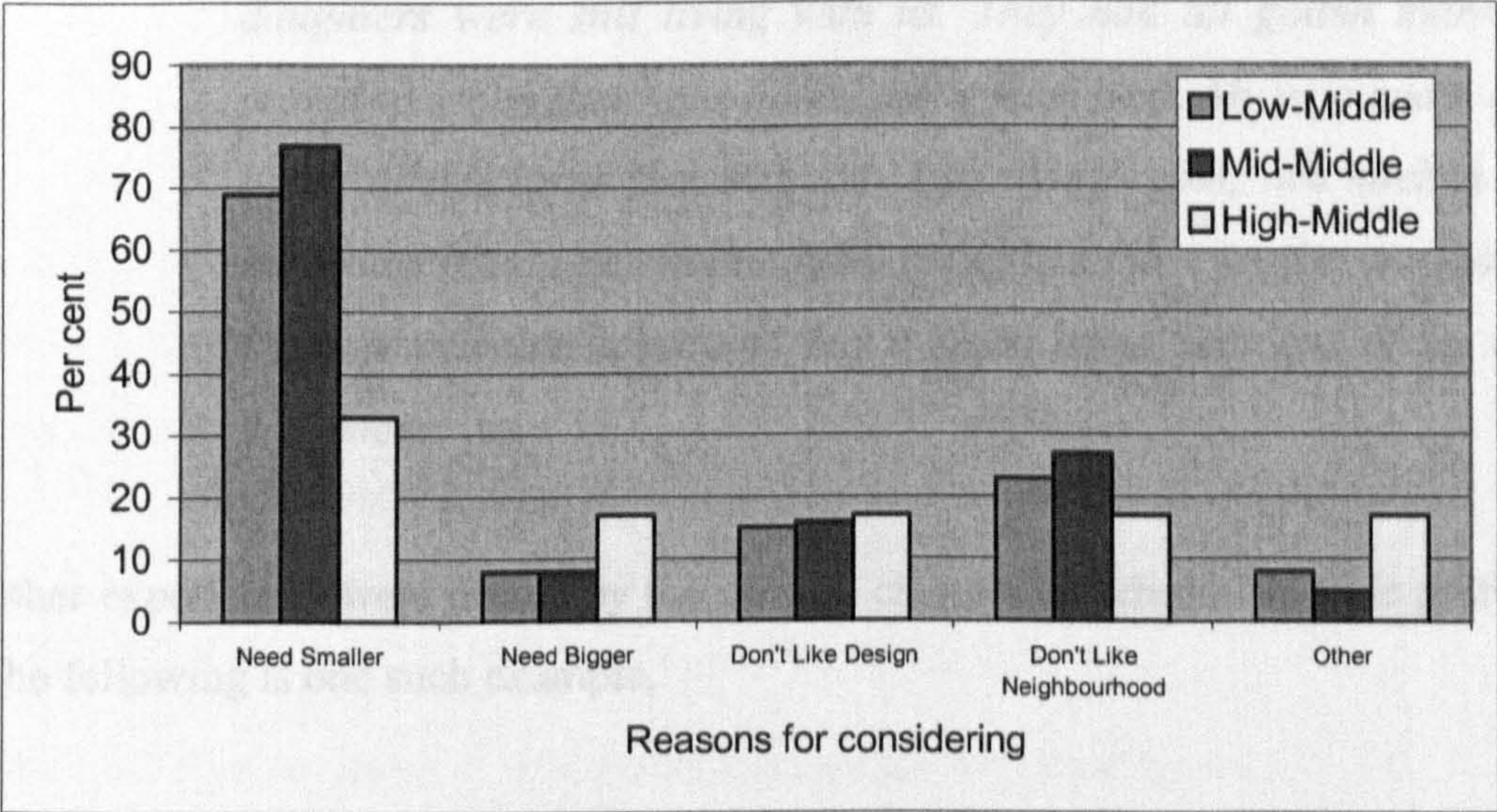
### **7.6.2 REASONS FOR PREFERRING TO ADJUST EXISTING HOUSING CONSUMPTION**

When households consider adjusting their current housing consumption, they normally do so for one or a combination of two or more reasons (Clark and Huang, 2003). Understanding the most important and common factors that drive preferences for housing adjustment decisions is a critical prerequisite for evaluating the conditions of the housing consumers and the housing supply system. Accordingly, every respondent



from the owner-occupant group who indicated that they have considered moving out of their current dwellings to give their reason(s) in an order of importance from a predetermined list of reasons which included the following answers. (1) need smaller dwelling (2) need bigger dwelling (3) do not like current dwelling design/ layout (4) do not like neighbourhood where current home is located (5) other reasons.

**Figure 7.6 What were the reasons for considering moving out of your current dwelling?**



*Source: fieldwork, 2003-2004*

As shown in figure 7.6 and contrary to findings of most previous housing adjustment studies conducted in different parts of the world, the preference of this population group is strongly dominated by the desire for reducing the amount of housing consumption rather than increasing it by wanting to move to smaller dwellings than the ones they currently occupy. This finding clearly testifies to the prevalence of highly inflated rates of housing consumption among housing subsidy recipient middle-class households (refer to discussion in chapter five).

In a bid to reduce the existing mismatch between their current dwellings and the preferred condition, the mid-middle and the low-middle subgroups have shown a high (78% and 69% respectively) propensity to move to smaller dwellings. Additionally, smaller, yet a significant percentage (32%) of the high-middle subgroup have also indicated their desire to lower their housing consumption.



Outcomes from the in-depth interviews with selected owner-occupant respondents have disclosed a number of interesting personal experiences leading to decision for wanting to move to smaller dwellings. Major reduction in the size of households particularly for older homeowners was one such experience that is highlighted in the following statement revealed by a mid-middle participant.

*About nine years ago, I built this house when my four grown-up daughters were still living with us. They had all gotten married and moved to set up their own homes away from here. My wife and I, are now living in this large five bedroom, two living room, two kitchen and six bathroom villa. I can not imagine going like this even for one more year. I like to sell this house and buy a small home near one of my married daughters.*

Other experiences were driven by the need to change household life-style preferences. The following is one such example,

*I have a very bad experience with house-maids and I am very determined to stop relying on them but there is no way that my wife alone can take care of this large house. That is why I am looking forward to selling this house and move to a smaller one that we can manage without having to rely on house-maids.*

Though at a much smaller scale, disliking the current neighbourhoods was the second most important reason for considering to change dwelling. 27 per cent of the mid-middle, 22 per cent of the low-middle and 18 per cent of the high-middle have indicated that their dissatisfaction with the location of their home plays a role in their wish to change dwelling. Wanting to move closer to the children's schools, and close relatives (i.e., parents, children or brothers) were among the most frequently mentioned reasons for dissatisfaction with location of current dwellings.

The third most important reason given for wanting to move out of their current home was because of dissatisfaction with home design and layout. Many households decide on the design of their homes with fantasies and lack of adequate knowledge of better



and more suitable design solutions. Therefore, when time comes and they have the chance to experience living in the house, they realize a wide range of inadequacies in their chosen layout. The following testimony highlights one such example.

*I used to fantasize about living in a two-storey villa but now I highly regret building a two-storey villa. I thought it would suit our needs. However, after moving in, my family has come to realize that such a layout is not practical for our daily living. My wife and kids are now pressuring me to relocate to a smaller single-storey villa.*

A much smaller percentage of the households in all three sub-groups who wished to move house was because they wanted to increase their housing consumption by seeking to move to larger dwelling.

**7.6.3 THE PERCEIVED COST OF HOUSING CONSUMPTION AND PREFERENCE FOR HOUSING ADJUSTMENT**

**Table 7.7 Cost of current housing consumption and whether considered moving out of dwelling**

Col %	Very Expensive (n=46)	Expensive (n=66)	Not Expensive (n=88)
Considered	71.7	33.3	2.3
Not Considered	28.3	66.7	97.7
n=200	DF= 2	Chi-square= 72.666	P.value <0.001

Source: fieldwork, 2003-2004

Table 7.7 shows a strong and positive correlation between the perceived cost of current housing consumption and the preference for adjusting housing consumption expressed by the desire to change housing unit ( $X^2= 72.7$ ,  $P< 0.001$ ). Nearly three quarters (71.7%) and one third (33.3%) of those who indicated that they perceive their current housing consumption as *very expensive* and *expensive* respectively, have mentioned that they have considered adjusting their current housing consumption by changing dwelling. This finding vividly shows that the higher the cost of housing consumption, the higher the inclination of the household to change its dwelling. The desire to move is highly motivated by the urgent need to reduce household expenditures by reducing housing consumption to more affordable levels. Hence, many affected households feel



that continuation of the strict ban on housing sales and renting imposed by the government policy has played a major role in prolonging their economic and financial hardship experienced by those households from what seems to be a case of housing over-consumption relative to their economic conditions. One mid-middle owner-occupant who seemed desperate with his situation came up with the following statement.

*I appreciate that the government has helped me to build a decent family house by giving me free land and interest-free loan. However, after spending three years in this new large villa, we find it extremely difficult to meet all housing expenses. I wish the government would now complete its favour by allowing us to sell this house and buy a more affordable one.*

A number of the heads of households who mentioned that the price of their current housing consumption was 'very expensive' expressed their fear that if the government did not allow them legally sell or rent their dwellings and seek alternative housing, they will continue to be trapped in their houses against the economic wellbeing of their households. A few were even willing to bear the legal consequence and threatened to go ahead and illegally rent or sell <sup>107</sup> their dwellings without the consent of the concerned government institutions.

## 7.7 HOUSING SPACE UTILIZATION PATTERN

Previous discussions in chapters three and five have highlighted that contemporary middle-income national households in Dubai Emirate live in comparatively large dwellings and enjoy one of the highest per capita rates of housing consumption within both historical and contemporary national and international contexts. However, at the same time, there have always been concerns about the way domestic space were utilised by their owners.

---

<sup>107</sup> This refers to the informal selling of a property through which the ownership of the property is transferred to another individual through a private agreement between the previous and the new owner but without legally and formally transferring the ownership title. Such practices are currently rare in Dubai Emirate. If pressured to pursue this option, many current owners may be forced to sell expensive properties at low prices because of high risk due to lack of ownership security.

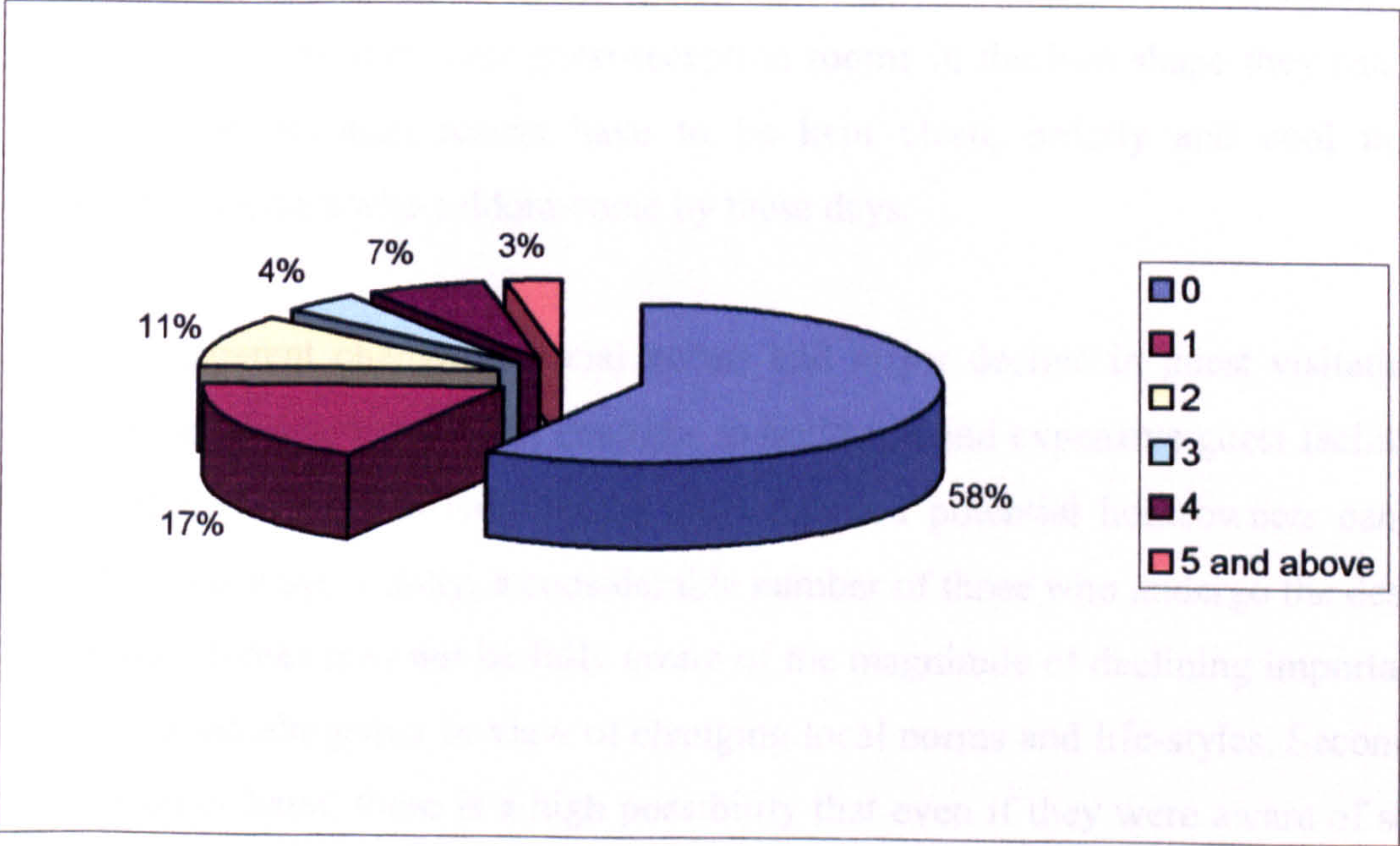


Therefore, the purpose of this section is to broadly investigate and dwell on the general pattern of utilization of some of the major spaces in the dwellings of the owner-occupant population. The discussion mainly emphasises two examples of spaces, namely, the guest reception room (*majlis*) and the dining room. Discussion will also be complemented by referral to the overall pattern of utilization of other spaces.

7.7.1 UTILIZATION OF GUEST-RECEPTION ROOM (MAJLIS)

To establish an understanding of the actual utilization pattern of the guest reception rooms in contemporary middle-income households, each respondent from the owner-occupant population was asked the following sequential questions. (1) how many times in the last thirty days (i.e., in one month) have they received guests in your guest reception room (*majlis*) (2) if you have received any guests in your majlis, how many hours did every visit take, and (3) what was the number of visitors in each visit? (4) does your household normally use the guest reception room for any other purposes or activities?

**Figure 7.7 How many times did your household receive guests in your guest reception room (*majlis*) in the past thirty days (one month)?**



Source: Fieldwork, 2003-2004

As can be seen from figure 7.7, the majority of 58 per cent have mentioned that they had not received any guests in their guest-reception rooms throughout the full previous



month. 17 per cent of the households had only a single visit for which they used their *majlis*. 11 percent have received guests in two occasions, 4 per cent opened their *majlis* three times to guests, 7 per cent had guests over for four times and lastly 3 per cent were more frequently visited by guests at five or more times.

In recent years, changing social trends have led to major decline in the frequency and the pattern of home visitation among UAE nationals. Unlike earlier times, the new generation in the country has access to a variety of options when it comes to spaces for social interaction. Today, people are more inclined to use public and semi-public spaces such as cafes, restaurants, ballrooms and private clubs for socialization and guest hospitality.

Responses from those owner-occupant participants who had received guests in their *majlis* have revealed that the average time of each visit in the guest-reception room was 2 hours and the average number of visitors each visit was only 3 persons. On the other hand, all respondents have also confirmed that they do not use their *majlis* for any other household activities. This clearly indicates that a great proportion of homeowners use their guest zones<sup>108</sup> for only a few hours a year, making them one of the least utilised sections of middle-class dwellings. Nevertheless, households feel socially obliged to present their guest-reception rooms in the best shape they can. At all times, guest-reception rooms have to be kept clean, orderly and cool in an anticipation of visitors who seldom come by these days.

Despite the apparent change in social norms and major decline in guest visitations, virtually all new homeowners still continue to build full and expensive guest facilities. This according to some private design architects and potential homeowners can be explained in two ways. Firstly, a considerable number of those who undergo the design of their future homes may not be fully aware of the magnitude of declining importance of the guest zone altogether in view of changing local norms and life-styles. Secondly, and on the other hand, there is a high possibility that even if they were aware of such realities, most homeowners would still be willing to invest large sums of money on

---

<sup>108</sup> On average, the guest zone comprise about 18 per cent of the built up area of a middle-class dwelling and it typically includes, a large guest reception room, a dining room, a toilet and a multiple washbasin space. Guest zones are the most costly of all rooms in terms of decoration and furniture.

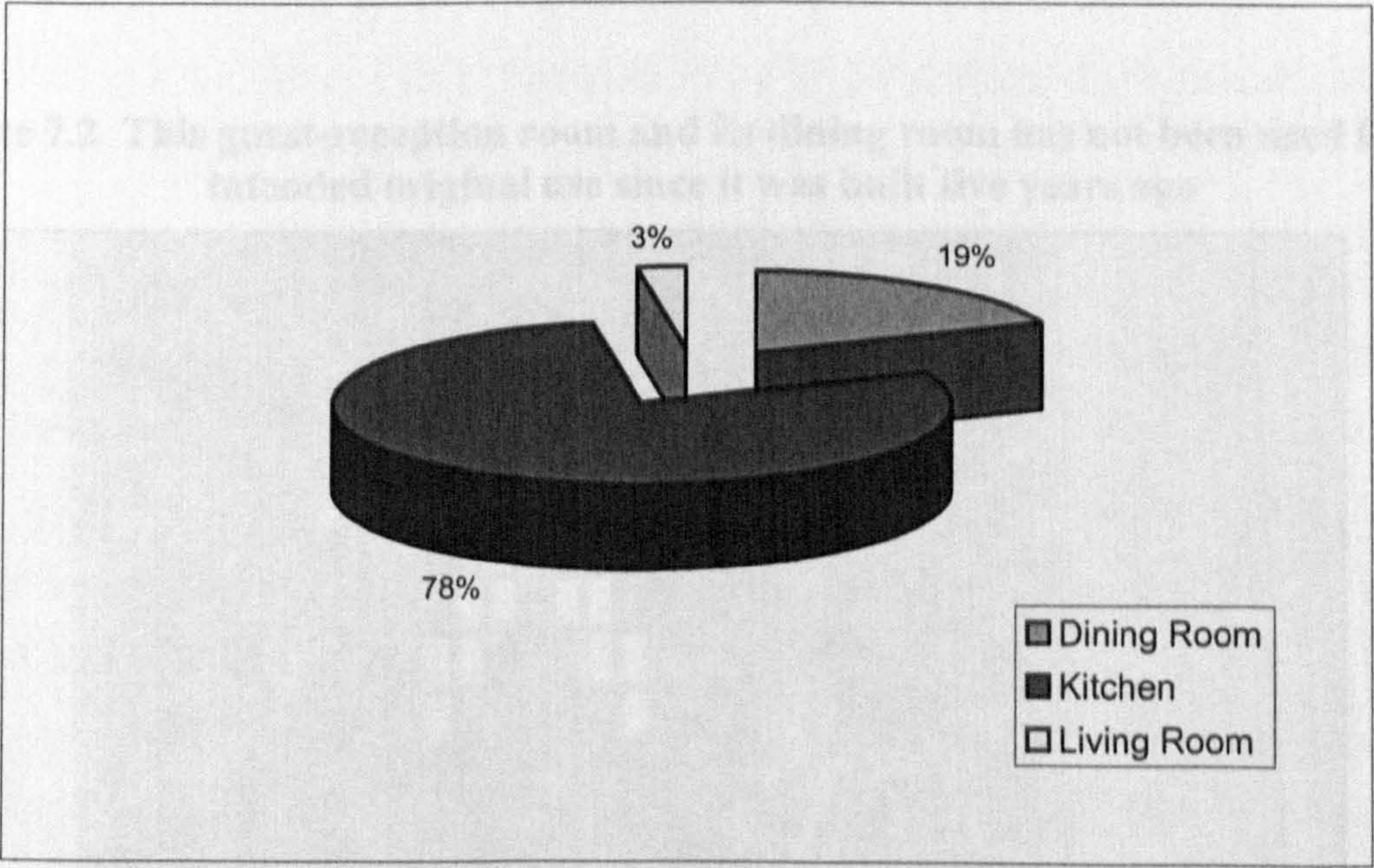


expensive and rarely-used domestic spaces such as the guest zone in order to overcome social pressures and secure home privacy if they ever have to receive guests in their homes.

7.7.2 UTILIZATION OF DINING ROOMS

Discussion in chapter five has explained that several new types of rooms that have single and highly specialised functions have been commonly integrated in most contemporary middle-class dwelling units. The dining room is one such space. To draw a picture of the pattern of utilization of dining rooms within middle-income households, all participants who stated that they had a designated dining room in their current dwellings were asked the following question. ‘During the last seven days, in which room did your household members have their breakfast, lunch and dinner’?

**Figure 7.8 Households with designated dining rooms and types of room used regularly for household’s daily dining**



Source: fieldwork, 2003-2004

Figure 7.8 shows that more than three-quarters (78%) of households with formally designated dining rooms use their kitchens for regular daily household dining activities. 85 per cent of them had two kitchens in their dwellings and despite having a dining room, they prefer using the second kitchen for household daily dining and only use the dining room a few times throughout the year when they have guests over.



Only 19 per cent of households with designated dining rooms use their dining rooms on daily bases for household dining purposes. Nearly all households in this category had two purpose-built dining rooms in their dwelling of which one was dedicated for household use and the other was reserved for guests. Finally, three per cent of the respondents indicated that despite the availability of a separate dining room in the dwelling, they utilize a portion of their living rooms for daily dining purposes.

### 7.7.3 UNUSED ROOMS AND SPACES

In addition to the general pattern of low level of effective utilization of some major spaces in the dwellings such as the ones discussed above, the owner-occupant and the supplementary field observational surveys have also disclosed that there were many rooms in middle-class dwellings that were never used for many years after they were built and the house was occupied. Those major spaces often include rooms such as living rooms, children bedrooms, bathrooms, dressing rooms, guest bedrooms, children playing rooms and to a lesser extent rooms in the guest zone.

**Plate 7.2** This guest-reception room and its dining room has not been used for its intended original use since it was built five years ago



*Source: Fieldwork, 2003-2004*

Unused domestic spaces which were left idle for periods between one to six years were either fully or partially furnished and in some instances not furnished at all. The



reasons given for leaving some rooms unused varied from one case to another and by type of rooms concerned. For instance, unused children bedrooms were mostly attributed to either having built extra bedrooms in anticipation of future growth in the number of children or because children were still too young to stay in their own private rooms and therefore, they end up sharing rooms with their parents or other siblings for a few years until they are able to move into their own rooms. Those households who had unused living rooms on the other hand, have mostly mentioned that they do not see why they need to use the second or in fewer cases even the third living room, as one room was enough for daily household gathering. A few of the mostly high-middle group who had unused guest bedrooms mentioned that so far they have not had any occasions where guests had to stay overnight, so they have not been able to make use of the rooms. Ironically, most architects have mentioned that they know beforehand that many of the rooms they design for their clients would not be effectively utilised for a long period of time, however, they take no interest in even discussing such an issue with those clients.

## **7.8 AN ALTERNATIVE HOUSING PROVISION APPROACH (the ready-built dwelling)**

The current approach of housing provision for the middle class which has been adopted over a decade ago is based on granting of a free residential plot and an interest-free housing loan for each eligible head of households. This implies that every household wishing to become a homeowner has to be closely involved in a lengthy and complicated process of housing design, specification setting and step by step construction. The preceding discussions have highlighted a number of negative externalities and consequences influencing the outcome of this process. Most notable are poor design knowledge and experience on behalf of homeowners, continual and sharp increase in construction cost, pervasive and overwhelming social influences, high cost of housing operation and maintenance and potential of abuse by some design consultancy firms. The results of such conditions have led to decreasing housing affordability, over-consumption and under-utilization of housing resources and inequitable access to public housing subsidies. Therefore, consideration of a more viable and responsive alternative approach to middle-income housing provision in



Dubai Emirate in the immediate short term is very essential for overcoming some of those and other strategic issues.

The alternative housing provision approach suggested to tackle some of the problems experienced under current method of provision involves changing the role of both PHFS and SZHP from just loan providers into housing developers. This entails that both institutions set up a system that encompasses the design and building of housing units which will then be sold to those who are interested and eligible for the interest-free housing loan. (Chapter eight includes a thorough discussion of the recommended institutional and procedural arrangements needed to activate the ready-built approach).

When approached with the general concept of the ready-built provision method, senior officials at both the PHFS and SZHP welcomed the idea and confirmed their preparedness to take the necessary steps towards the adoption of this approach. However, both institutions were not sure if the target population would accept such a major shift in housing provision policy.

The following discussions shed light on some of the key advantages and disadvantages of the ready-built provision approach as opposed to the current plot and loan method of provision.

#### **Advantages of the ready-built approach:**

- High potential for major reductions in the overall cost of building each dwelling unit as opposed to building each unit separately. Major savings come from reduced cost of administrative fees, contractor mobilization, procurement and efficient use of building materials and machineries, labour cost and finally design and supervision fees<sup>109</sup>. The saving in housing unit construction will ultimately allow both the PHFS and SZHP to use their resources more efficiently and help in providing housing to a much larger number of households with the same available resources.



- Contrary to the existing custom-designed units, the ready-built approach provides a greater opportunity to achieve more efficient and economical housing designs particularly in terms of dwelling built-up area and number and sizes of rooms. More efficient design layout can be instrumental in reducing the capital cost of housing construction and potentially future cost of operation and maintenance.
- Currently with the custom-designed and built approach, every homeowner has to spend so much of their personal times on stressful housing design and construction process that may take well up to twenty four months. adopting the ready-built approach will certainly reduce this undue burden on the homeowners as it will be handled by a technically qualified team from either the PHFS or SZHP.
- Unlike the current practice of random and sporadic development of allocated residential plots, the ready-built approach will produce an efficient and orderly phasing of development in the middle-class residential districts. This will ultimately result in more efficient utilization of public infrastructure.

#### **Disadvantages of the ready-built approach:**

- There is a risk that some small-scale building contractors may lose business opportunities as a result of moving away from individually built single units into large-scale projects where packages of large number of units are built which can only be awarded to major contractors.
- Some smaller consultancy firms who depend highly on small-scale single villa design and supervision projects may risk losing some of their potential businesses owing to this shift to large-scale multi-unit design and supervision that can only be awarded to larger firms.

---

<sup>109</sup> A recent Preliminary cost estimate calculation carried out by a renowned private engineering consultant in Dubai Emirate has revealed that a saving of approximately 33% in the cost of building each villa-type unit could be gained for projects of 20 or more villa units of similar quality and size. (Al-Bayan, 20/3/2006).



### 7.8.1 WILLINGNESS TO ACCEPT A READY-BUILT DWELLING

Before any of the two housing financing institutions (i.e., PHFS and SZHP) decide to assume a new role of building and allocating ready-built units, it is of utmost importance to find out if the target population would accept such a major shift in the way housing is provided. Therefore, every respondent from the owner-occupant participants was asked if he/ she would have accepted a ready-built house instead of their current custom-designed house. The respondents were given the following three answers to choose from (1) Yes (2) Yes, with certain conditions (3) No.

The respondents were also asked to mention all the conditions they have if they happen to choose the second answer 'yes, with certain conditions'. More frequently cited conditions will have to be considered in support of the success and wider acceptance of this proposed approach.

**Table 7.8 Would you accept if the PHFS and the SZHP build homes and sell them to you against the interest-free loan instead you having to go through design and construction yourself?**

Col %	Low-Middle (n=48)	Mid-Middle (n=128)	High-Middle (n=24)	Total (n=200)
Yes	28.6	9.7	6.7	14
Yes, with conditions	47.6	39.8	20	39.5
No	23.8	50.5	73.3	46.5
DF= 4                      Chi-square= 17.3220                      P. value < 0.0017				

*Source: fieldwork, 2003-2004*

Table 7.8 shows that the relationship between income level and the willingness to accept a ready-built dwelling unit as opposed to the current custom-designed approach is significant ( $X^2= 17.3$ ,  $P< 0.0017$ ). This clearly reveals that the lower the income, the higher the tendency to accept a ready-built housing unit as an alternative to the custom-built dwelling. For the entire population sample, 14 per cent have given their outright acceptance to this option and 39.5 per cent have accepted the proposal, however, with certain conditions. Finally, about half (46.5%) of the participant have rejected the proposal altogether.

Less than one-quarter (23.8%) of the low-middle income subgroup have rejected the idea of ready-built alternative. Half (50.5%) of the mid-middle have disapproved the



idea and the majority of the nearly three-quarters (73.3%) of the high-middle income group have declined to accept the ready-built and preferred to continue with current approach. This finding also supports the conclusions reached in chapter six which indicated that the higher the income, the stronger the inclination for using the dwelling size and design features as signs of prestige and social distinction in the community. Therefore, most high-middle income respondents fear that, if they would have to choose from a ready-built dwelling, they may risk losing the opportunity of having a distinctive and a highly personalised house and as a result end up with a dwelling that is no different from others.

### **Stated Conditions for Acceptance**

The following points cover a brief discussion of some of the most important conditions stated by the respondents who stated that they would have not mind accepting a ready-built units as an alternative provided that certain conditions are fulfilled. Analysis of the list of conditions shows that practically, all conditions fall under three major categorical preferences.

#### **1- Locational Choices:**

- Housing units need to be built in several different locations in the city so that interested buyers can have a wide range of choices from which to select.

#### **2- Personalization and Choices of Housing Qualities:**

- Interested buyers must have the option to choose from a wide range of designs of both floor plan and elevations.
- Interested buyers must be allowed to determine the colour of the interior and exterior of their dwellings.



- Interested buyers must be given the freedom to choose their preferred housing fittings and fixtures such as lighting units, bathroom suites, kitchen cabinets and decorative gypsum finishing.
- Interested buyers must have the option to choose villas that contain separate service blocks (*mulhaq*) apart from the main unit.

### 3- Flexibility of Housing Adjustment Options:

- Dwellings must be designed in such ways that they can be extended either vertically or horizontally if additional spaces were needed to be added.
- Owners must be guaranteed the right to sell or trade their homes when necessary. Obviously, this condition will require introducing major changes in the existing policy and regulations. Chapter eight will provide some discussion on the importance and methods of applying the right to sell policy.

## 7.8 SUMMARY

This chapter examined four major aspects. Firstly, it assessed the cost implications of the existing high trends of housing consumption, both from the capital and operation and maintenance sources. Findings of this chapter has clearly shown that housing construction cost has been steadily rising in the past decade and it is highly set to continue rising in the foreseeable future. This will make housing provision very expensive when compared with much slower growth in household incomes. Rapid increase in private housing construction cost is also expected to place greater pressure on the government to increase the value of its interest-free loans. Major increase in the value of individual loans requires significant subsidies from the government or otherwise will risk reducing the number of approved loans. The chapter has also found that the bigger the size of dwelling and subsequent rates of per capita housing consumption, the more expensive the cost of operating and maintaining the dwelling. This has become evident with regard to cost of housekeeping and hiring of maids and



cost of domestic electricity used mainly for cooling purposes. The chapter has shown that the vast majority of loan beneficiaries do not carefully consider the future cost of owning large dwellings while going through the design process. This is often leading to poor decisions on dwelling size on behalf of homeowners. As anticipated, the overall indication is that about half of the homeowners are mainly from the low and mid-middle segments perceive the cost of their current housing consumption to be expensive or very expensive compared to their income and affordability and in view of demands for other basic living requirements.

Secondly, the findings illustrated some degree of mismatch between the existing and preferred housing consumption pattern within the study population. A considerable number of owners expressed their need and willingness to adjust their housing consumption for various reasons. However, the majority felt that they were over-consuming housing by living in dwellings that were larger than what they needed and, therefore, wanted to move to smaller dwellings. Because of government's strict ban on selling and renting the subsidised dwellings, many of those wanting to adjust have become trapped in dwellings that are not suitable for their needs or very expensive to keep.

Thirdly, assessment of housing space utilization has revealed that spaces in contemporary middle-income dwellings are substantially under-utilised. For instance, major spaces such as the guest zone which is normally composed of a large guest reception room, a dining room and bathroom with large washbasin counters are only used for a few hours each year. Moreover, because the majority of households design and build their ultimate dwellings at once in anticipation of long-term demand for space and because of duplications in some mono-functional spaces, several rooms remain unused for many years after the dwellings are occupied by the households. Of course, this trend continues while there are so many households in need of basic housing are having to wait for a number of years before they are awarded the interest-free loans.

Fourthly, the chapter has proposed and tested the acceptability of the ready-built concept as an alternative housing provision approach. Results from our survey show a promising rate of approval for this approach particularly by the low and mid-middle



segments of the population. The assessment also includes several conditions for accepting the new approach proposed by the target population.



## **Chapter 8:**

# **SUMMARY OF STUDY FINDINGS AND RECOMMENDATIONS**



## 8.1 INTRODUCTION

This final chapter has three main purposes. Firstly, it brings together the main findings of this research by identifying the historical transformation of middle-class housing conditions with particular emphasis on changing patterns of space consumption. This will be followed by the identification of the most important factors that have led to the current trend of excessive over-consumption of housing space among middle-class households. It also summarises the main implications of such high rates of housing over-consumption. Secondly, it outlines a number of policy recommendations which are intended to remedy the shortcomings and drawbacks of existing policies and practices. Moreover, the aim is also to turn those existing policies and practices discussed in chapters three, five, six and seven more sustainable and responsive to the needs and preferences of the target population. The chapter is structured in such a way that it discusses the recommendations and the main findings and issues of the study in tandem i.e., without separating the two elements. For practicality reasons, the selected recommendations for this study will focus mostly on the feasible immediate course of actions and to a lesser extent on strategic medium term policy alteration which will involve some reform in the middle-class housing provision policy. It is important at this time to point out that because of high degree of interplay among the various sets of recommended policy measures, that they are adopted and implemented in their entirety. Thirdly, the chapter will conclude with the identification of a number of issues and topics for future studies. The identification of those studies is based on analysis of issues raised by this study.

## 8.2 STUDY CONCLUSIONS

The core objective of this research was to study and analyse the issue of high rates of housing consumption among contemporary middle-class household in Dubai Emirate. In short, the study was designed to identify the scale of increase in the rates of housing consumption among this study group, how and why such increases have emerged, what are the various implications of the observed increase and finally, what policy measures are required to overcome any negative implications related to this issue. The discussion



below will present a summary of this study's findings and answers to those basic research questions.

### **Historical Trends of Middle-Class Housing Space consumption**

Chapter four of this study provided a detailed and analytical assessment of the historical transformation of housing space consumption among middle-class households in Dubai Emirate within the past four decades. This study has identified three distinct phases; the *traditional pre-oil* phase from 1900 to 1965, the *transitional pos-oil* phase from 1965 to 1990 and the *contemporary post-oil* phase from 1990 to date.

Before the discovery and exploitation of oil in the international markets during the 1960s, the United Arab Emirates (UAE) was considered as one of the most deprived regions of the world. However, since then the country has enjoyed remarkable rise in national economic prosperity and sharp increase in personal and household income. Surplus oil economy and adoption of generous subsidy programmes by both UAE federal and Dubai local authorities have entirely transformed the social, economic and physical landscape of the country. One such area that has been highly influenced by the new wave of transformation and modernization is housing.

Housing conditions in the pre-oil era were extremely poor as more than 80% of the population was housed in overcrowded makeshift dwellings made of palm leaves known locally as *barasti*. By the 1960s, housing conditions were undergoing major improvements as the government began to use oil money in subsidising both income and housing in the form of free serviced residential plots for all middle-class national households and guaranteed high-paying public sector jobs. With better income and increasing subsidies, housing consumption among newly emerging middle-class households during this period had improved dramatically as overcrowding dropped from 3.2 to only 1.6 persons per room and the per capita share of domestic space rose from 15 to 32 square metres per inhabitant. The physical conditions of housing had witnessed major improvements as fragile palm frond materials were replaced by more permanent cement brick and concrete structure.



Following the experience of other neighbouring oil-rich Arab Gulf states, in 1993, the Dubai government introduced a new housing policy scheme aimed at providing middle-class households with interest-free housing loans in order to facilitate their access to what the government calls adequate owner-occupant housing. The value of each loan was set at AED 500,000 (\$136,240) with a repayment period of 25 years. From the time since the interest-free loan programme was introduced, typical middle-class dwellings have more than doubled in size and average housing consumption rate has reached a staggering 71.5 square meters per person exceeding all national, regional and international standards. Moreover, the average number of person per room has declined sharply to only 0.6.

Analysis in this study has shown a substantial increase in the size of contemporary middle-class dwellings, both in terms of number of spaces and sizes of each room while average household size decreased. The median number of spaces of all types reached 22 including both habitable and non-habitable rooms falling into three types of general functional categories; household zone, services zone and guest zone. On the other hand, sizes of individual rooms are considerably larger than the officially adopted minimum room size standard. Analysis has revealed that the median sizes of both habitable and non-habitable rooms are more than two and a half and many instances even three and a half times the minimum standard. There is also a noticeable degree of duplication in several types of specific rooms such as living rooms, kitchens, dining rooms and guest reception rooms. Massive increase in dwelling size and noticeable drop in the average household size have implied that middle-class households are now consuming much greater quantities of housing.

### **The Nature and Limitations of Current Middle-Class Housing Provision Policy**

In 1993, the local government of Dubai established the Private Housing Finance Scheme (PHFS) and in 1999, the UAE federal government founded the Sheikh Zayed's Housing Programme (SZHP). Both programmes aim to provide the Dubai nationals with adequate housing units through the provision of interest-free long-term



housing loans. Each middle-class households is also entitled to receive one free of charge residential plot from the Dubai government.

The amount of an individual loan was set at AED 500,000 (\$136,240). The AED 500,000 according to PHFS and SZHP was determined on the basis that it was perceived to be sufficient for building an adequate housing unit that could meet the needs of national households. Every head of household loan applicant must prove through official documents that he or she does not already own a house to live in or owns one that is too small for the household or it is badly deteriorated. The programme allows a maximum repayment period of 300 month (i.e. 25 years) in which all borrowers regardless of their exact income have to pay a fixed monthly installment of AED 1,666 (\$454).

Although both loan schemes are centered around the objective of providing *adequate* housing that meets the *needs* of national households, neither adequate housing nor housing needs have been sufficiently defined. Additionally, both PHFS and SZHP simply assume that all middle-class households have similar housing needs regardless of differences in household size, income and housing aspirations.

In September 2004 the PHFS decided to increase the values of each interest-free housing loan by 50 per cent to reach AED 750,000 (\$204,360). The reason given for this was because of increasing housing construction cost. The aim was to alleviate the financial burdens on those middle-class individuals who receive the interest-free loans by reducing their needs for borrowing additional money from private commercial banks to supplement the government loan.

Since 1993 to the end of 2005, both PHFS and SZHP have received a total of 21,377 applications from eligible individuals housing loan seekers. They have managed together to grant only 6,506 loans representing only 30.4 per cent of total number of applicants. The remaining 14,871 (i.e. 69.6 per cent) of the applicants are on the waiting list. Average waiting time for loan approval has now reached between six to nine years. This is owing to shortage of adequate funds, large value of individual loans and small and fixed loan repayment structure. The interest-free housing loan waiting-



list and time are expected to face further major increases particularly after the recent increase in the amount of individual loans by the PHFS.

Both PHFS and SZHP place no restrictions or guidelines on the size or the cost of dwellings built by the loan beneficiaries as long as they pay the difference in cost on their own. However, the dwelling units that are financed by the PHFS and SZHP loans cannot under any condition be sold or transferred to a third party nor can they be rented out. This as explained by both institutions is because the government provides the loans to help its citizens house their families and not to turn them into landlords.

### **The Factors Influencing Increase in Contemporary Housing Consumption**

Chapter six of this study has investigated in a great detail the most important factors that have driven the recent surge in the contemporary middle-class dwelling sizes and the consequent sharp increase in the rates of per capita housing consumption. The following is a brief discussion of some of the most important ones.

- Findings of this study clearly show that the government's provision of generous housing subsidies particularly in the form of large sums of interest-free soft loans is the most important factors leading to increased housing consumption among middle-income households in Dubai Emirate. Government's assumption that all middle-class households are not able to house themselves without the AED 500,000 housing loan is entirely inaccurate, as two thirds of the owner households have indicated that even if there was no interest-free loan programme from the government, they would have gone ahead and built their dwellings. However, the majority have said that they would have built smaller homes than the one built with the government loan. Moreover, analysis has shown that with provision of only 50% of current loan value, even more households would have managed to build their dwellings, though smaller compared to the full loan. A small percentage particularly those belonging to the high-middle segment confirmed that even without any government loan they could manage building large dwellings similar to the ones built with the



AED 500,000 loan. Such findings can lead to three main conclusions, firstly, generous interest-free housing loans lead to major distortion in rates of housing consumption. Secondly, the majority of the loan recipients may only need partial support from the government e.g., only 50% of the loan value in order to be able to house themselves. Thirdly, some of the target population particularly those from the high-middle segment have the full ability to house themselves without any help from the government. However, because the subsidised loan is available to all middle-class, everyone can take advantage of it regardless of his/ her actual need.

- In addition to the impact of government interest-free loan, there are several other economic supporting factors that contribute to the rise in the housing consumption. Private banks which provide interest-based personal loans have been in the last few years playing significant roles in providing additional cash which in turn allow loans recipients to build larger dwellings than they can with only government loan and personal resources.
- Social and cultural influences also play highly significant roles in pushing up the rates of housing consumption among middle-class households in Dubai. The desire for social prestige and distinction mostly among high-middle population and the countervailing motives for conformity and similarity to social groups mostly within the low and mid-middle segments fuel the current trends of high consumption rates. Thus, within contemporary middle-class culture, housing and particularly its size is perceived highly as a status good.
- This study has also shown that private housing design consultants play some tangible role in the increased rates of housing consumption as many of them encourage their clients to design and build larger homes which will guarantee them more return in design and supervision fees. Private consultants take advantage of poor knowledge of housing design and somewhat flexible housing construction budgets on behalf of their clients.



## **Implications of Excessive Housing Space Consumption**

### **Rising Cost of Dwelling Construction**

Cost of private housing construction has been steadily rising in the past decade and it is highly set to continue rising in the foreseeable future. For instance, the cost of building every square metre of middle-class dwelling rose from AED 1,076 in 1993 to AED 2,017 in 2005. Moreover, this cost is anticipated to reach AED 2,770 by 2015. This continued growth in construction cost will make housing provision very expensive particularly in view of much slower growth in real household incomes. Unless housing consumption trends are rationed and managed more efficiently, rapid increase in private housing construction cost will place much greater pressure on the government to increase the value of its interest-free loans. Major increase in the value of individual loans requires significant subsidies from the government or otherwise will risk reducing the number of granted loans and thus the supply of middle-class housing.

### **High Cost of Housing Consumption (operational costs)**

The cost of housing operation is a major item on the list of ongoing household expenditures. This study has shown that the vast majority of loan beneficiaries do not carefully consider the future cost of owning large dwellings while going through the design process. This is often leading to poor decisions on dwelling size on behalf of homeowners. Empirical work within this study has clearly indicated that the bigger the size of the dwelling and subsequent rates of per capita housing consumption, the more expensive the cost of operating and maintaining the dwelling. This has become evident with regard to cost of housekeeping and hiring of maids and cost of domestic electricity used mainly for cooling purposes. The overall indication is that about half of the homeowners mainly those from the low and mid-middle segments of middle-class perceive the cost of their current housing consumption to be expensive or very expensive in relationship to their income and affordability.



## **The Under-Utilisation of Existing Housing Units**

Assessment of the pattern of housing space utilization has revealed that spaces in contemporary middle-class dwellings are substantially under-utilised. For instance, major spaces such as the guest zone which is normally composed of a large guest reception room, a dining room and bathroom with large washbasin counters are only mostly used for a few hours each year. Moreover, because the majority of households design and build their ultimate dwellings at once in anticipation of long-term demand for space and because of duplications in some mono-functional spaces, several rooms remain unused for many years after the dwellings are occupied by the households. Ironically, this trend of under-utilization continues while there are so many households in need of basic housing are having to wait for many years before they are awarded the interest-free loans.

## **A Mismatch Between Current Housing Consumption and Household Preferences**

This study has identified that there is a considerable degree of mismatch between the existing and preferred housing consumption pattern within the study population. Empirical work has revealed that a substantial number of homeowners (i.e., 28.5%) expressed their need and willingness to adjust their housing consumption for various reasons. However, the majority felt that they were over-consuming housing by living in dwellings that were larger than what they needed and, therefore, wanted to move to smaller dwellings. While others were either unhappy with their current location or housing design. Because of government's strict ban on selling and renting the subsidised dwellings, many of those wanting to adjust have become trapped in dwellings that are not suitable for their needs or otherwise very expensive to use.

## **8.3 STUDY RECOMMENDATIONS**

### **8.3.1 DEVELOP AND ADOPT STANDARDS FOR APPROPRIATE/ADEQUATE LEVELS OF HOUSING CONSUMPTION**

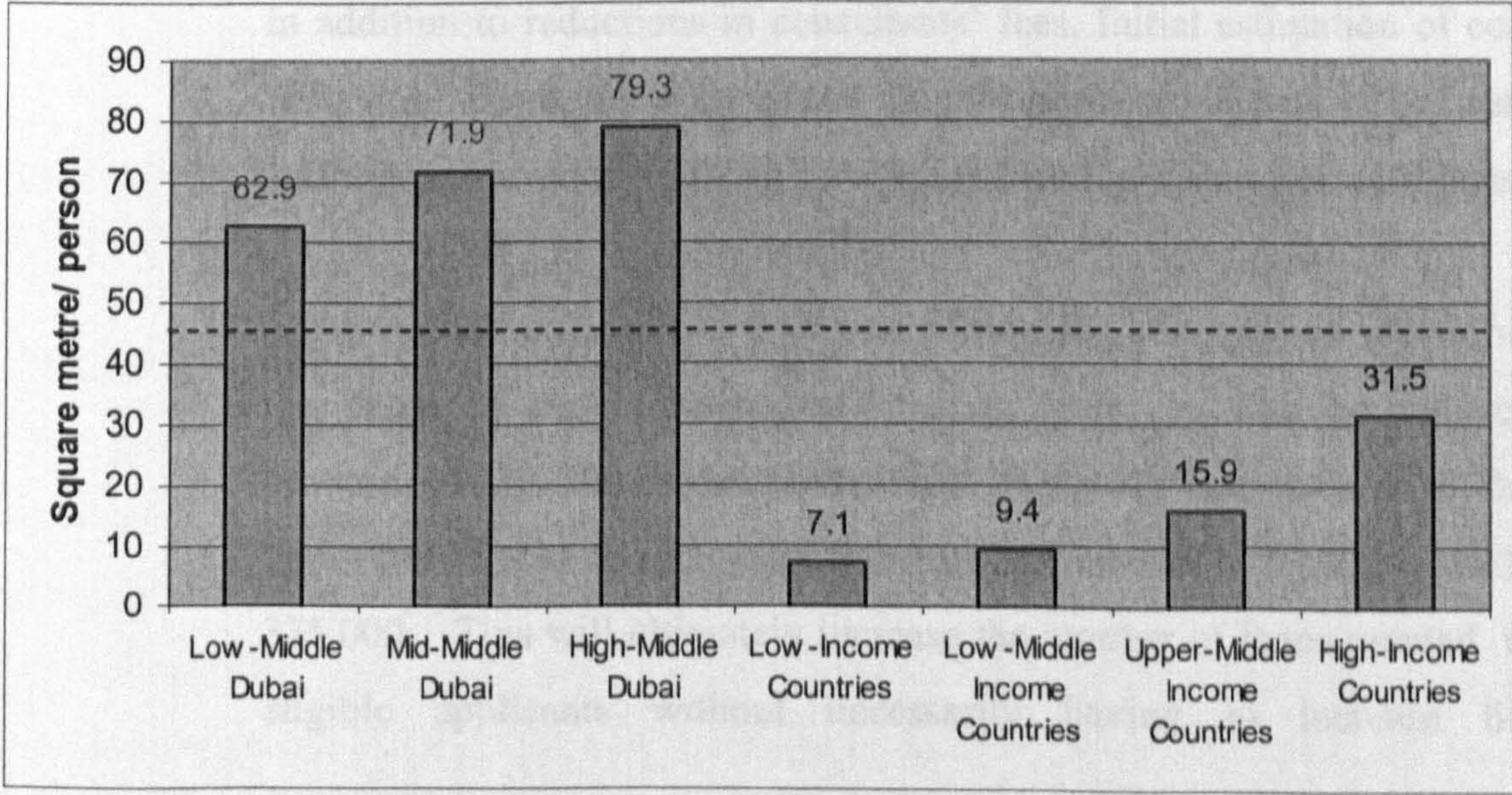
Discussions in chapters three and five have clearly shown that, despite the fact that both the PHFS and the SZHP were set up by the government to enable middle-class



nationals households to acquire and consume adequate housing units, neither of the two programmes have in any concrete manner defined what constitutes adequate housing. Additionally, chapter six has also concluded that the allocation of highly generous and poorly targeted housing loan subsidies has so far played the most important role in the recent surge in the rates of housing consumption among middle-class housing loan beneficiaries in Dubai Emirate. The introduction of specific and measurable thresholds for an adequate level of housing consumption and then ultimately matching between those adequacy thresholds and the value of the interest-free housing loans are essential tools for achieving more efficient and equitable allocation of housing subsidies.

Therefore, this study recommends that both the PHFS and the SZHP adopt clear and measurable standards for the adequate housing they aim to help in providing to their target middle-class households. Current rates of housing consumption are very high by all international standards. See figure 8.1.

**Figure 8.1. Comparison of per capita space consumption between different study population subgroups and other income groups of the world**



Sources: Dubai data based on sample study fieldwork, 2003-2004. Other areas from Angel (2000:261).



Moreover, as illustrated in chapter seven, domestic spaces in contemporary middle-class dwellings are highly under-utilised. Therefore, it is the recommendation of this study to propose a housing consumption adequacy threshold of between 40 and 45 square metres per person instead of the currently prevailing high rates of 62.9 to 79.3 square metres per person<sup>110</sup>. This can be achieved mainly by reducing the median size of each room in the dwellings by 25 to 40 per cent of current median sizes<sup>111</sup> and without necessarily cutting down the number of habitable rooms of different types. Such reductions in the per capita rates of housing consumption will surely help in achieving the following;

- 1- Substantial reduction in the overall size of middle-class dwelling built-up areas. Under the proposed housing consumption adequacy standard, median dwelling sizes are expected to reach only between 250 and 280 square metres<sup>112</sup> compared to the current sizes of 390 to 492 square metres.
- 2- Such considerable reductions in the median size of middle-class dwellings will lead to major reductions in the cost of building each unit in addition to reductions in consultants' fees. Initial estimation of cost reduction shows that a saving of roughly between 30 and 45 per cent could be achieved if dwelling sizes are reduced to the suggested figures.
- 3- Major reductions in the overall cost of housing construction mean that the value of each interest-free housing loan can also be reduced proportionately. The recommendation of this study is to scale down the upper limit value of each loan from the current AED 750,000 to AED 375,000. This will ultimately increase the number of loans granted to eligible applicants without necessarily having to increase the

---

<sup>110</sup> This proposed standard can be tested on a pilot project level and assessed through a special study.

<sup>111</sup> As analysis in chapter five has identified, median size of all types of rooms being currently built by the study population are excessively high compared to the Dubai Emirate minimum room size standards indicated in the Building Code.

<sup>112</sup> This is based on the current average household size of 6.2.



government subsidies. The immediate reduction in the value of interest-free loan may not be politically feasible as it may create an undue public outcry, however, it should be considered within an overall and gradual reform in the middle-income housing provision policy. The following comment made by a middle-income loan applicant before the loan value was increased to AED 750,000 clearly suggests that some of those on waiting list are even willing to accept smaller loans than the government assumes is adequate.

*While some people are suggesting that the government should increase the amount of the interest-free housing loan, there are so many of us who have been waiting for many years to get any kind of housing assistance. (Albayan, 12/4/2004).*

4- Major reductions in the size of dwelling units are expected to create high potential for reducing the anticipated future costs of housing maintenance, repair and operations (i.e., cost of housemaids, furnishing and electricity bills) in comparison to current dwelling sizes.

### **8.3.2 PROVIDE TRAINING/ TECHNICAL ASSISTANCE ON HOUSING DESIGN**

The data in chapters five and six of this study have revealed that the vast majority of new middle-class homeowners lack the basic knowledge and have very limited exposure to private housing design principles. A large number even lack proper comprehension and appreciation for the basics of domestic spaces and room dimensions. This is primarily because most of them have no previous experience as they have not been directly involved in a housing design process. Moreover, currently there are no efforts from any of the concerned housing and construction related institutions to provide future homeowners with some sort of systematic awareness and orientation programme which can familiarize them with issues related to private housing design.



As a result and as our field investigation has shown, most of the middle-class owners-to-be in Dubai Emirate turn to their inexperienced friends and relatives for advice on housing design matters. Many homeowners are also believed to have been misled by greedy private design consultants who are mainly interested in maximizing their financial returns from each project.

In order to assist future homeowners in making better-informed decisions, this research strongly recommends that both the PHFS and the SZHP initiate a private housing design training/ orientation programme for all individuals who have been granted the interest-free housing loan from either of the two institutions. The basic aim of such programme is to make all beneficiaries of government housing loans more aware of efficient and cost-effective housing design solutions.

Attendance of the suggested training/ orientation programme has to be made mandatory and to ensure that everyone has attended, the release of loan granting certificate will need to be linked to participation in such a programme. The detailed contents and composition of the proposed training/ orientation programme will need to be studied separately, however, in this study the following guidelines are suggested to enhance the outcomes of such training efforts.

- 1- To secure more effective participation, the duration of training programmes must be kept short. One to two interactive seminar-type sessions should be sufficient.
- 2- It is important to keep the number of each seminar attendants small (i.e., no more than 10 to 15 persons) so that the messages can be easily passed through to each participant and their individual questions and queries could be answered thoroughly.
- 3- Because income level plays a major role in the social perception of housing consumption choices, it would be more beneficial to group the attendants based on their income groups.



4- For the seminars to be effective, training provider needs to avoid explaining the issues from a purely theoretical perspective, it has to be rather focused on hands-on tips and enriched with examples of local cases and supported with drawings, floor plans pictures and video recordings of actual cases.

5- Because women, wives in particular play prominent roles in the design decisions of contemporary private homes, this study recommends that they are also involved in the orientation programme.

6- The seminars will need to cover the following topics/ issues;

- a. bases for selecting the right consultant.
- b. bases for selecting the right contractor.
- c. the roles and responsibilities of clients, consultants and contractors.
- d. importance of the housing construction contract.
- e. efficient/ inefficient housing layouts and adequate/ inadequate room size and configuration. This will need to be related to the above proposed housing consumption adequacy thresholds.
- f. the relationship between dwelling size and number of spaces and cost of construction and long-term cost of maintenance, repairs, housekeeping, furnishing and electricity bills. Findings of studies such as this should be utilised in explaining the relationships.
- g. demonstrate through numerous examples of pictures and colourful front elevation designs that smaller dwellings can look attractive and reflect personal choice and taste just as much as larger ones.

In addition to carrying out training/ orientation seminars, this study also recommends that both the PHFP and SZHP develop and disseminate basic guides and leaflets targeting those who will be involved in designing their private homes. The proposed publications should cover similar topics and issues to those mentioned in the training/ orientation seminars. It would be very useful if copies of the guides and leaflets are



posted on a tailor-made website for this purpose as this will provide easy and continuous access for potential homeowners and the general public who may be interested in this subject.

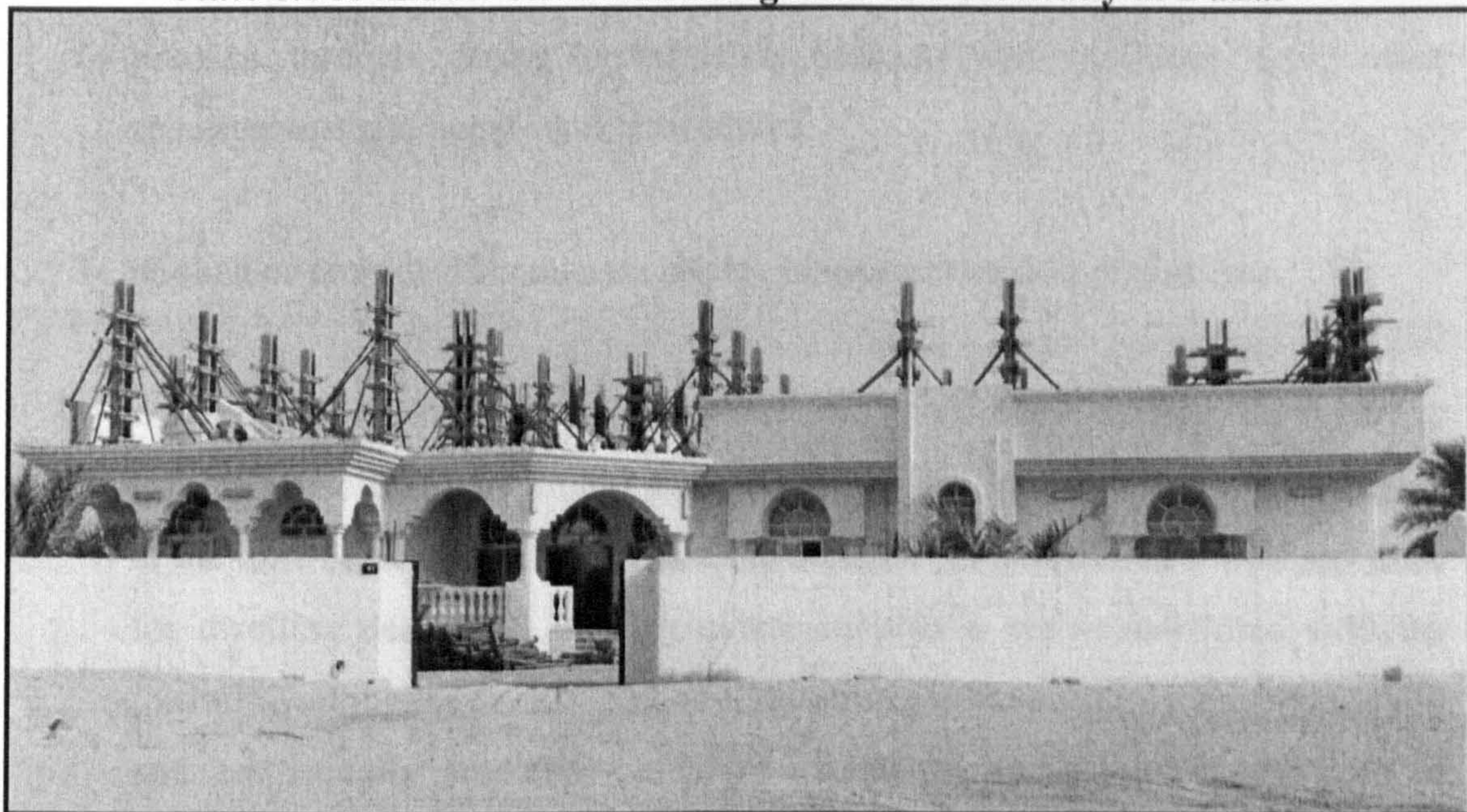
### **8.3.3 ENCOURAGE PHASED EXTENSION AND GROWTH OF DWELLINGS**

One of the main findings of this study is that the overwhelming majority of contemporary middle-class homeowners prefer to build their ultimate family homes in one single stage. This practice has created a new phenomenon in which small and newly formed households are now occupying large dwellings built to satisfy long-term space demand, sometimes very far in the future. There are two major problems that are associated with this new trend.

- 1- Acquisition of those homes entail very high initial cost of construction covered mainly by subsidised government loans and in many cases high-interest loans from commercial banks to supplement the government interest free housing loan.
- 2- Many years of underutilization of expensive housing resources most of which are paid for by public subsidies in the form of very soft and generous interest-free loans. This is all occurring while a large number of applicants are having to wait for many years before they are considered for the loan.

To overcome this problem, this study recommends that the government should adopt policies and measures that would encourage new homeowners to consider building their homes in stages and according to their emerging needs rather than designing and building everything at once. This will help in reducing the cost of housing acquisition by breaking and spreading the construction cost over several years. If supply of housing space is directly linked to actual need, housing resources would be utilised more effectively and efficiently.



**Plate 8.1 A middle-class villa being extended vertically in Dubai**

*Source: Fieldwork, 2003-2004*

Encouraging and convincing future homeowners to accept the multi-stage concept of private dwelling construction require creating the right types of incentives and disincentives for all major stakeholders. The following is a suggested list of recommendations that can help in making housing extension as popular choice within newly formed middle-class homeowners.

- 1- establish a separate funding programme for financing private housing extensions through interest-free and low-interest loans. The fund must have its own unique identity and publicity campaigns. It can be named the “*Dubai Funds for Private Housing Extension and Improvement*”. The creation of such a high-profile programme will help in achieving a number of objectives. The results of this study have revealed that a considerable proportion of the target population can and would build smaller dwellings using their private resources if they had no access to a full interest-free housing loan. By initiating such a programme homeowners will receive legitimate assurances that the government policy supports housing extensions just as much as it supports the construction of new homes. This will ultimately reduce their fear about not having access to adequate funds for housing extensions when they will need to extend.



- 2- encourage small contractors to become active players in the housing extension process through easing up their registration and insurance fees, other requirements and paper work procedures.
- 3- abolish or provide discounts on private housing extension permit fees.
- 4- ensure that when new dwellings are designed, they include some future extensions so that they would not need to go through the design process again at the time of extension. This has three benefits (1) homeowners only pay once for dwelling design (2) housing extension plan is well-coordinated with the overall dwelling layout and plot configuration (3) the house is both structurally and aesthetically prepared for future extensions particularly in the case of vertical expansion.

#### **8.3.4 AVOID HAPHAZARD MIXING OF HIGH-INCOME DWELLINGS WITHIN MIDDLE-INCOME HOUSING AREAS**

Karl Marx has once said that;

*A house may be large or small; as long as the surrounding houses are equally small it satisfies all social demands for a dwelling. But let a palace arise beside the little house, and it shrinks from a little house to a hut (Marx, 1952: 216).*

Existing housing land allocation policies in Dubai Emirate allow for the haphazard mixing of middle and high income housing plots<sup>113</sup>. As discussion in chapter six has highlighted, high-income households normally build huge and conspicuous mansion-like villas in areas that are predominantly middle-class. This research found that such practices often lead to two negative phenomena.

- 1- When very large and elaborate high-income homes are built very close to middle-class homes, there are considerably high possibilities that many of the

---

<sup>113</sup> This is done either through randomly allocating larger plots in the original middle-class subdivision plans or by amalgamating several middle-class plots and allocating them as one large plot to high-income households.



middle-class homeowners feel inferior. This feeling is further aggravated as they are often subjected to derogatory comments from both people that they know and strangers.

- 2- There is a strong indication that many of those middle-class individuals whose plots are adjacent to high-income mansions have much higher inclination to increase the size of their dwellings just to reduce the risk of their future home looking too small within its immediate surrounding.

Despite its limited benefits of reducing spatial segregation between these two income groups, this researcher believes that the disadvantages of such haphazard mixing overshadow all the advantages. Therefore, the recommendation of this study is to abandon this policy and only allocate middle-class households with residential plots within areas designated as middle-class districts.

### **8.3.5 INITIATE THE READY-BUILT DWELLING UNIT OPTION APPROACH**

In chapter seven an alternative housing provision approach namely the ready-built dwelling unit option was suggested and its acceptability was tested. Initial results were encouraging as 14 per cent of respondents accepted it without any reservations and almost 40 per cent said that they would have chosen this option provided some conditions are fulfilled. Moreover, both the PHFS and the SZHP have also promised full support given the advantages it provides.

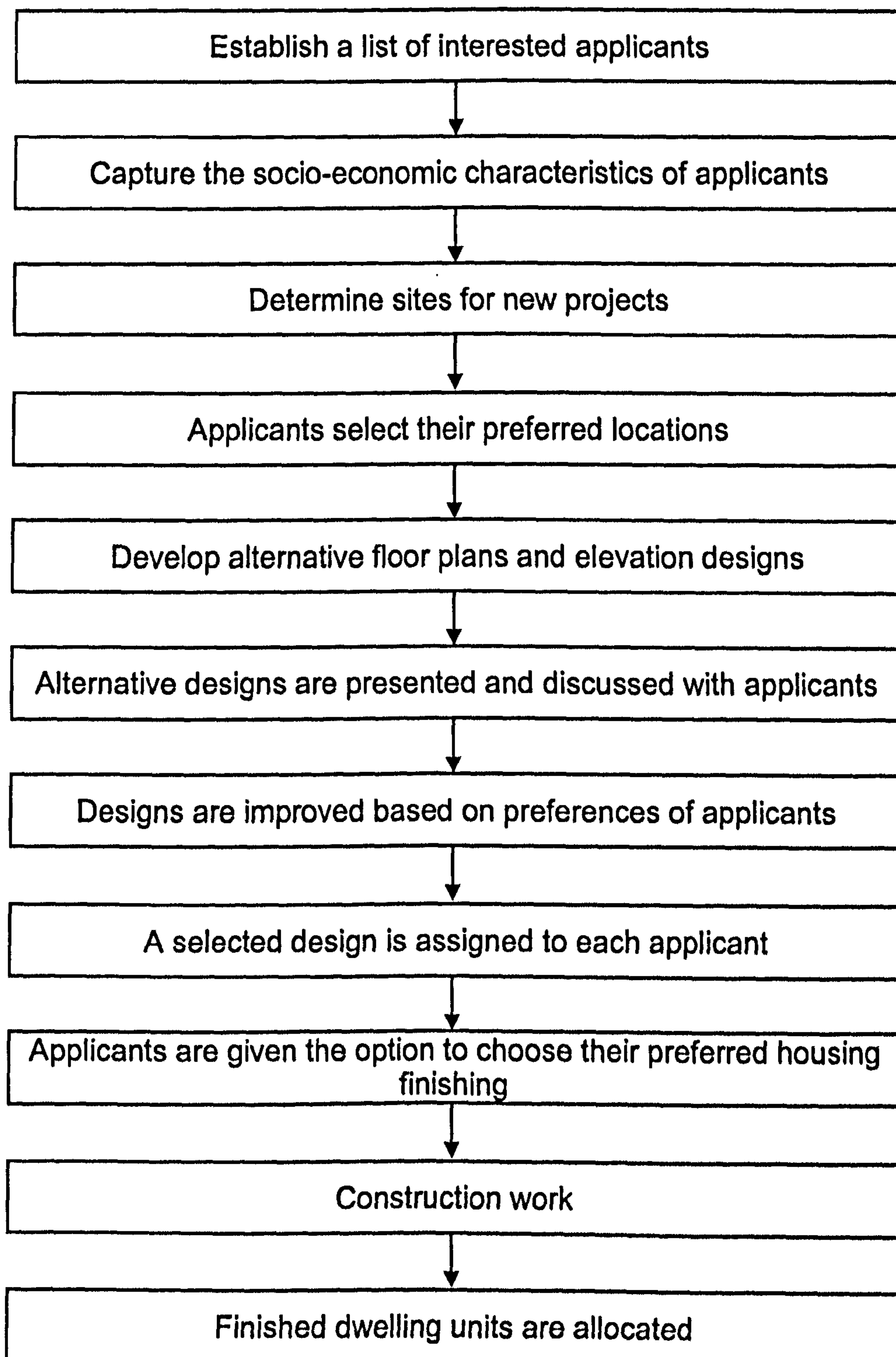
Because of the overall benefits this option provides, this study recommends that the two institutions partially modify their roles from just providing loans to a developer's role. This means that in addition to paying interest-free housing loans, they will be involved in building and selling ready-built housing units to their eligible applicants. However, it is very important to emphasize at this point that traditionally public sector housing authorities are not the most efficient party when it comes to housing construction. Therefore, this study strongly recommends that the two institutions outsource the design and construction roles of the ready-built dwellings through



private consultants and building contractors. This will be essential to control cost and reduce the bureaucracy.

Figure 8.2 shows the proposed eleven steps general process for the implementation of the ready-built approach and the subsequent discussion will highlight all relevant activities and tasks required in each step. The components of this process are defined in view of the specific conditions stated by the informants in the sample survey and by the objective of involving future homeowners as much as possible in the housing process. However, the central aim is to initiate a process of designing and building more affordable and efficient dwellings for the middle-class study population. It is hoped that the implementation of this approach will provide an excellent pilot examples for future homeowners belonging to the same category.



**Figure 8.2 The proposed general process for the ready-built approach**

*Source: Author*



### **1- Establish a list of interested applicants**

The first step in this process involves establishing a list of those who are interested in the ready-built option from the overall eligible loan applicants. Based on our findings, targeting low and mid-middle income applicants could lead to higher acceptance rates. The aim is to establish a real understanding of the number of interested applicants so that further planning can be done for the following steps. This study recommends that in the initial phases of this new experiment, only 300 to 400 applications should be accepted.

### **2- Capture the socioeconomic characteristics of interested applicants**

Once the preliminary list of interested applicants is prepared, specific and detailed socioeconomic characteristics of those applicants and their households must be collected using specially designed questionnaires. The questionnaire must include items such as; name of applicant, age, gender, marital status, income, educational attainment, number, gender and ages of children, and number of individuals and households expected to live in the dwelling.

### **3- Determine sites for new projects**

The PHFS and the SZHP need to collaborate with the Dubai Municipality in order to secure four to five sites for the construction of the new housing projects. The further apart the sites are the better as this will provide the applicants with more diversified options to select from.

### **4- Applicants select their preferred locations**

Once the exact project sites are agreed with Dubai Municipality, the applicants are invited to select their preferred locations, until all slots are taken. At this moment, each applicants is assigned to a specific site. In case an applicant wants to change his/ her selected location he/ she should be officially allowed to exchange the locations with another interested applicant.



## **5- Develop alternative floor-plan and elevation designs**

The project owner institutions will need to hire two to three private consultant firms with excellent records and reputation in both design and supervision in order to prepare a range of alternative housing unit floor plans and elevation design. This study recommends about six alternative plans, two for bigger and more mature households and four for newly formed smaller households.

Alternative dwelling designs are highly recommended to follow the following general guidelines:

- 1- The total design built-up area of each dwelling must be between 250 to 280 square metres. This will bring the average per capita space consumption up to 40 to 45 for an average sized and mature middle-class household.
- 2- Avoid duplication in rooms such as kitchen, living room, majlis and dining room.
- 3- Dwellings designed for smaller and newly formed households must be designed in a way that they can be easily extended or built in more than one stage particularly building more bedrooms.
- 4- Middle-class homeowners place a great emphasis on the external appearance of their homes. Therefore, it is important that several well rendered and presented elevations and design perspectives are prepared before starting the next step. This is very crucial for the successful marketing of the alternative designs as many of the applicants are keen on how their dwelling will look from outside.

## **6- Alternative designs are presented and discussed with applicants**

Once the alternative designs are prepared and reviewed by the project owner institution, it is important that the applicants are given some opportunity to express



their views and comments on the proposed prototype floor plans and elevations. This can be best handled through inviting interested applicants to workshops involving about twenty applicants at each time, the consultant design architects and representatives from the loan institutions. Applicants can be grouped into two groups which are bigger and more mature households and smaller and newly-formed ones.

This workshop gathering provides an excellent platform for discussing efficient versus inefficient design solutions and the relationship between housing design characteristics and future maintenance and operation costs. It is important that each attendant appreciates the fact that his/ her household's housing needs will be adequately met without having to borrow or add additional private funds to the interest-free loan. Only genuine and substantive comments should be taken into consideration.

#### **7- Designs are improved and finalised**

Upon finishing the presentation/ discussion workshops, the consultants shall be required to incorporate all necessary and agreed on improvements. Final floor and elevation plans are prepared for the applicants to choose from.

#### **8- A selected design is assigned to each interested applicant**

The final selections of the alternative designs are presented to the applicants in order to select their preferred options. Once selection is made, each applicants will have to sign a document indicating his final selected design. At this point and after an applicant has officially made his/ her final commitment for the ready-built design option, he/ she has to return the residential plot title that was granted by the government earlier.

#### **9- Applicants are given the option to choose their preferred housing finishing**

Following the selection of preferred housing unit design, applicants are asked to choose their preferred selection of bathroom suites, lighting fixtures, flooring materials, kitchen fittings from a predetermined list of choices. This is done to give the future owners some choices on housing decisions, however, in order to control



construction cost, the selection must be kept to a limited pre-determined list. Once choices are made, all applicants would have to sign a document indicating their final selection. This along with the signed selected design document will be kept in the record with a copy of them given to the applicant.

### **10- Construction work and procedures**

After determining the final number of units from each of the prototype designs and construction specifications, the consultants will have to prepare full design sets of drawings and the contract document for tendering purposes. For the project to achieve its economy of scale objectives, adequate number of similar units (i.e., 20 to 30) would need to be grouped and built within a close proximity of each other.

Several contractors would then be invited to bid for tender for the projects either all in lump sum package or each location separately. This decision would need to be based on construction market analysis, size, and capability of construction firms being invited. Once the contract is awarded, the actual construction work should last between twelve to fourteen months after which the completed projects are handed over to the project owner institution. Throughout the construction period, it is the responsibility of the consultants to make sure that projects are implemented according to the signed contract and they would have to satisfy reporting project progress and status to the project owner institution.

### **11- Dwelling units are allocated to their owners**

Upon the final delivery of the projects by the contractors and once occupancy permits are secured, the applicants will receive their chosen housing units after which the monthly repayment installements of their interest-free loan will start.

### **Allow exchanging of dwelling units among ready-built owners**

As part of the ready-built policy package, this study also recommends that, after completing one year in the new ready-built housing unit, owners must be given the



freedom to exchange their units with other owners of the ready-built units. The introduction of this policy is important as it will provide homeowners with some limited choices for housing adjustment and mobility. This will also provide a good testing ground for a much wider policy of providing all middle-class homeowners with further rights to housing adjustments.

### 8.3.6 INTRODUCE THE RIGHT TO SELL POLICY

An efficient and well-functioning housing policy environment is one that provides the housing consumers with choices and flexibility to adjust their housing consumption when necessary (Kingsley and Turner, 1993). However, existing middle-income housing provision policy in Dubai takes a contrary position by rigidly banning the selling, renting and even exchanging of dwellings financed through government interest-free loans. While motive behind this '*home for life*' housing policy adopted by government authority is understandable, its negative implications and consequences on both individual homeowners and the housing sector at large are far reaching.

Under current circumstances, those who acquire their dwellings through interest-free government housing loans are only allowed the right to use their dwellings. However, as discussion in chapter seven has highlighted, more than a quarter (28.5%) of our owner-occupant informants expressed their desire to move out and change their current housing consumption for various different reasons. Many of them were desperate to move out of their current dwellings as the overall cost of their housing consumption was too high to bear. A great majority of those who wished to move out of their dwellings wanted to reduce their housing consumption by moving to smaller dwellings. In summary, because of this policy, many homeowners are trapped in dwellings that they do not find anymore satisfying their preferences or financial ability.

In order to reduce the mismatch between the preferred and actual levels of housing consumption among middle-class households, this study recommends the introduction of the right to sell policy. However, to avoid any misuses and to equitably safeguard the interest of different concerned parties, this study suggest the following conditions and guidelines to be implemented as part of the new right to sell policy.



1. Homeowners must spend a minimum period of three years in the dwellings before they can apply for permission to sell their dwellings.
2. Everyone applying for permission to sell his/ her dwelling must indicate on an official application form the following information;
  - a. reasons for which owner is considering selling the dwelling.
  - b. What are his/ her plans for future accommodation and how intends to satisfy household's housing needs.
3. All homeowners applying for permission to sell their dwellings must sign an official statement indicating that they will never again approach the government for a free residential plot or any other housing loans or subsidies.
4. All married homeowners applying for permission to sell their dwellings must provide the evidence that their spouses do not have any objections to selling the household dwelling. Housing provision policy in Dubai Emirate is intended to serve a national household rather than just an individual. Therefore, this condition is introduced in order to safeguard the interest of the rest of the household members (i.e., wives and children) against the unilateral decision of the head of the household.
5. Each homeowner who sells a dwelling will have to pay off the balance of the loan and an additional 10 per cent of the total house sale value should be paid to the loan providing institution. Such a condition will help in achieving the following objectives;
  - a- Deter those who have received interest-free housing loans from misusing public subsidies by trying to make substantial personal profits.
  - b- Homeowners will strive to sell their dwellings with highest possible price in order to maximize their return in view of having to pay 10 per cent fees on their home sale value.
  - c- The repaid loan and additional 10 per cent revenue would be use to finance other loan seekers.



### 8.3.7 ADJUST LOAN REPAYMENT STRUCTURE

Existing rules adopted by both the PHFS and the SZHP dictate that all interest-free loan beneficiaries and regardless of their income level should pay back their loans in 25 years i.e., 300 easy monthly installments. Under current loan policy some low-middle income loan beneficiaries pay as high as 33 per cent of their monthly income in loan installments while on the other hand, some high-middle income pay no more than 7 per cent of their income. In order to reduce loan recovery period and inject more equity into the process and ensure that the two programmes can increase the number of loan approvals within shorter time spans, this study recommends that the amount of monthly repayment installments should be progressive rather than a flatly structured. The higher the income the bigger the installment. However, it is important that the monthly installment does not exceed 25 per cent of total household disposable income for all income groups so that households' ability to spend on other needs such as food, transportation, education, health, clothing and recreation is not jeopardised.

### 8.4 CONCLUDING REMARKS 'unintended consequences'

This study has demonstrated through empirical work, how the interest-free middle-class housing loan programme which was designed to improve the housing conditions of its target groups has resulted in a series of negative and *unintended consequences*. The interest-free housing loan has played an instrumental role in pushing up the average size of middle-class dwellings allowing the per capita housing consumption among this group to substantially exceed all international standards. Meanwhile the cost of housing construction has been growing steadily while there has been a shortage in the housing loan funds. This has resulted in major increases in the size of the waiting list and therefore, number of years spent waiting for the loan. Although the aim of the government's loan policy has been to help middle-class households acquire and consume adequate housing units, results from this research have proven otherwise. More than a quarter of those who acquired their dwellings through the housing loan programme are not satisfied with their housing conditions and have considered moving out. The majority of them have expressed their desire to move to smaller



dwelling either because their current dwellings were too expensive to use or too large for the size of their households.

## 8.5 FURTHER AREAS OF RESEARCH

The aim of this research was to study housing consumption among middle-income households under interest-free housing loan policy in Dubai Emirate. Specifically the study examined the historical transformation of housing conditions, identified the process, key stakeholders of contemporary housing provision system and the most significant factors that have influenced the recent rise in rates of housing consumption among the study population. Additionally, the different implications of this new trend were discussed and highlighted from a policy perspective. However, because of paucity of data and lack of housing policy studies in the country, further studies that are supported with sufficient and up-to-date information need to be carried out in order to help the government make better-informed policy decisions.

First of all, it is highly important that the PHFS and SZHP consider replicating a study similar to this research provided that a probability sampling method is used to extract a sample from a sampling frame that is accurate and up-to-date. Adequate resources should be made available so that larger proportions of owner-occupants and owners-to-be are included in the surveys. This should provide opportunity for more comprehensive and firm understanding of the socioeconomic characteristics and housing conditions and preferences. Moreover, special studies are needed to be conducted on a number of specific policy issues and themes that were encountered in the course of this research. The following list includes some of the most important issues.

- 1- *Review and evaluation of the existing middle-income interest-free housing loan policy.* Studies are needed to be conducted on the long-term viability of this form of subsidised housing. The studies will examine the possibilities for shifting away from the current system of subsidised interest-free loans towards a more sustainable system of market-based housing mortgage. Initial findings of this study indicate



that both the high and mid-middle segments of the middle-class population should be able to afford housing themselves through a market-based mortgage and without the help of the government. This however, requires further assessment.

- 2- *Middle-class housing consumption and the sustainability agenda.* The findings of this study provide clear indications that current patterns of middle-class housing consumption may be in conflict with the basic principles of the sustainability agenda <sup>114</sup>. However, this needs to be backed up by further research to examine the environmental, economic and social dimensions of the issue. Future research will also need to propose and test alternative scenarios for turning current middle-class housing more sustainable.
- 3- *Housing extension process, mechanism and constraints.* Further research needs to be conducted on the concept of housing extension within contemporary middle-income housing environment, its process, key stakeholders, constraints faced by homeowners and possible means of improving the role of extension in the housing supply system.
- 4- *The relationship between private housing design consultants and the owner-to-be clients.* Because of the importance of the roles played by private design consultants in the housing provision process and the complexities and conflicts involved in their relationship, it is important that a study is conducted to explore the nature of this relationship in order to help improving it for both parties.
- 5- *The role of women in the contemporary private housing design.* Our initial analysis has indicated that women namely wives play pivotal

---

<sup>114</sup> Excessive housing consumption results in major increase in demand for building materials, water, electricity, land resources and generate more pollutants.



roles in the design of contemporary middle-income dwellings. Special studies are needed to study this role in much greater detail.



## **SELECTED BIBLIOGRAPHY**



- Abdelkarim, M.** (2001) *Employment and Employability in a Small Oil Economy-UAE*. Shaker Publications, The Netherlands.
- Abdullah, M. M.** (1978) *The United Arab Emirates: A Modern History*. Croom Helm, London.
- Abercrombie, N., Hil, S. and Turner, B.** (2000) *The Penguin Dictionary of Sociology*. Penguin Books, London.
- Abou-Auda** (2002) *An Economic Assessment of the Extent of Medication Use and Wastage Among Families in Saudi Arabia and Arabian Gulf Countries*.
- Abu-Ghazzeh, T.** (1997) *The Dialectic Dimensions of Homes as an Expression of Identity and Commuality in Amman, Jordan*. Housing Studies, Vol. 12, No. 2, pp. 247-263.
- Abu-Lughod, J.** (1996) *Urbanization in the Arab World and the International System*. In; *The Urban Transformation of the Developing World*, edited by; Gugler, J. Oxford University Press.
- Abu Shehab, A.** (2000) *The United Arab Emirates in the Era of Affluence: an Anthropological Study of Consumption*. Unpublished Ph.D. Dissertation, University of London.
- Ackerman, F.** (1997) *Consumed in Theory: Alternative Perspectives on the Economics of Consumption*. Journal of Economic Issues, Vol. 31, No. 3, pp. 651- 664.
- Adams, G. and Schvaneveldt, J.** (1985) *Understanding Research Methods*. Longman, New York and London.
- Akbar, J.** (1998) *Home and Furniture: Use and Meaning of Domestic Space, Jeddah, Saudi Arabia*. Unpublished Ph.D. Thesis, University of Newcastle upon Tyne.
- Akpinar, A.** (1992) *Towards a Quality Appraisal of Modern Housing in Saudi Arabia*. Ekistics, 354, May/ June, pp. 189-194.
- Akpinar, A. And Aksugur, N.** (1993) *An Overview of Housing Policy in Saudi Arabia: Successes and Failures in Reshaping the Built Environment*. Open House International, Vol. 18, No. 2, pp. 28-35.
- Al-Afgani, A.** (1990) *The Saudi House in the Past, Present and Future: A study of Changes*. Unpublished Ph.D. Thesis, University of Glasgow.
- Al-Bayan Arabic Daily Newspaper** (8/10/2000; 6/3/2005; 25/2/2005; 15/9/2004; 3/8/2004; 13/7/2004; 28/3/2005; 12/3/2004; 6/3/2005; 16/8/2004; 16/2/2005; 25/7/2005; 12/4/2004; 31/7/2006)
- Alemarat Alyoum** (13/7/2006; 22/7/2006; 1/1/2007)



**Al-Fahim, M. (1995)** *From Rags to Riches: A Story of Abu Dhabi*. The London Centre of Arab Studies, London.

**Al-Faqih, S. (1994)** *Traditional House and Contemporary UAE Architecture*. Open House International, Vol. 19, No. 2. pp. 28-38.

**Al-Faqih, S. (1993)** *House Formation and Architectural Identity in Urban Amman*. Open House International, Vol. 18, No. 2, pp. 21-27.

**Al-Hathloul, S. And Edadan, N. (1998)** *Housing Stock Management Issues in the Kingdom of Saudi Arabia*. Housing Studies, Vol. 7, No. 4, pp. 268-279.

**Al-Hemaidi, W. (2001)** *The Metamorphosis of the Urban Fabric in an Arab-Muslim City: Riyadh, Saudi Arabia*. Journal of Housing and Built Environment, Vol. 16, pp. 179-201.

**Al-Hussayen, M. (1995)** *Significant Characteristics and Design Considerations of the Courtyard House*. Journal of Architectural and Planning Research, Summer, pp.91-103.

**Al-Iriani, M. (2005)** *Climate-Related Electricity Demand-Side Management in Oil-Exporting Countries- the Case of the United Arab Emirate*. Energy Policy. Vol. 33, pp. 2350-2360.

**Al-Ittihad Arabic Daily Newspaper (3/5/2004)**

**Al-Kaabi, N. and Hadipriono, F. (2003)** *Construction Safety Performance in the United Arab Emirates*. Civil Engineering and Environmental systems. Vol. 20, No. 3, September, pp. 197-212.

**Allen, D. and Anderson, P. (1994)** *Consumption and Social Stratification: Bourdieu' Distinction*. Advances in Consumer Research. Vol. 21, pp. 7-74.

**Al-Mansoori, M.J. (1997)** *Government Low-Cost Housing Provision in the United Arab Emirates. The Example of the Federal Government Low-Cost Housing Programme*. Unpublished Ph.D. Dissertation, University of Newcastle upon Tyne.

**Al-Khaleej Arabic Daily Newspaper (17/2/1998; 13/12/2000; 23/2/2005; 3/10/2004)**

**Al-Moosa, A. (1984)** *Kuwait: Changing Environment in a geographical Perspectives*. Bulletin (British Society for Middle Eastern Studies), Vol. 11, No. 1, pp. 45-57.

**Al-Rostomani, A. (1991)** *Dubai and its Architectural Heritage*. Al-Safeer Publishing and Advertisements Establishment. (in Arabic).

**Al-Saati, A. (1989)** *Housing Finance and Residents' Satisfaction: The Case of the Real Estate Development Fund (REDF)*. Open House International,, Vol. 14, No. 2, pp. 33-41.



**Al-Saati, A. And Akbar, J. (1993)** *The Role of Professional Designers in the Muslim World*. Open House International, Vol. 18, No. 1, pp. 28-31.

**Al-Shafiei, S. (1997)** *The Spatial Implications of Urban Land Policies in Dubai Emirate*. Unpublished MSc. Dissertation, University of Wales, Cardiff.

**Al-Tasan, H. (1998)** *An Evaluation of Housing Finance in Saudi Arabia: The Real Estate Development Fund's Policies and Alternative Options*. Unpublished Ph.D. Thesis, University of Durham

**Altman, I. (1975)** *The Environment and Social Behavior: Privacy, Personal Space, Territory and Crowding*. Books/ Cole Publishing Company, Monterey, California.

**Altman, I. And Chemers, M. (1980)** *Culture and Environment*. Brooks/ Cole Publishing Company, Monterey, California, USA.

**Altman, I. And Gauvian, M. (1981)** *A Cross-Cultural and Dialectic Analysis of Homes*. In *Spatial Representation and Behavior Across the Life Span*, Edited by; Liben, L., Patterson, A. and Newcombe, N. Academic Press, New York, London and Toronto.

**Altman, I. And Werner, C. (1985)** *Home Environments*. Plenum Press, New York and London.

**Amaldoss, W. and Jain, S. (2002)** *An Analysis of the Impact of Social Factors on Purchase Behavior*. Review of Marketing Science Working Papers. Vol. 2, Issue 1, Article 4. [www.bepress.com/roms](http://www.bepress.com/roms).

**American Public Health Association (1950)** *Planning the Home for Occupancy: Standards for Healthful Housing*. Public Administration Service, Chicago.

**Amir, T. (1984)** *The Asch Conformity Effect: A Study in Kuwait*. Social Behavior and Personality. Vol. 12, pp. 187-190.

**Amis, P. and Lloyd, P. (editors) (1990)** *Housing Africa's Urban Poor*. Manchester University Press, Manchester.

**Amuzegar, J. (1982)** *Oil Wealth: A very Mixed Blessing*. Foreign Affairs. Vol. 60, Issue 4, pp. 814-822.

**Angel, S. (2000)** *Housing Policy Matters: A Global Analysis*. Oxford University Press.

**Arias, E. (editor), (1993)** *The Meaning and Use of Housing: International Perspectives, Approaches and Their Applications*. Averbury-Aldershot, Brookfield, USA.

**Arimah, B. (1997)** *The determinants of Housing Tenure Choice in Ibadan, Nigeria*. Urban Studies, Bol. 34, pp. 105-124.



- Arrondel, L.** (2001) *Consumption and Investment Motives in Housing Wealth Accumulation: A French Study*. Journal of Urban Economics, Vol. 50, pp. 112-137.
- Askari, H. and Jaber, M.** (1999) *Oil-Exporting Countries of the Persian Gulf: What Happened to all that Money*. Journal of Energy Finance and Development. Vol. 4, pp. 185-218.
- Azar, O.** (2004) *What Sustains Social Norms and How they Evolve?* Journal of Economic Behavior and Organization, Vol. 54, pp. 49-64.
- Baer, W.** (1979) *Empty Housing Space: An Overlooked Resources*. Policy Studies Journal, Special Issue, pp. 220-227.
- Baer, W.** (1977) *Housing Indicators and Standards in the USA*. Ekistics, Vol. 261, pp. 71-77.
- Bahammam, A.** (2003) *Making the Contemporary Saudi Housing Affordable*. The Journal of Gulf and Arab Peninsular Studies, No. 109, pp. 87-115. (in Arabic)
- Bahammam, A.** (1998) *Factors Which Influence the Size of the Contemporary Dwelling: Riyadh, Saudi Arabia*. Habitat International, Vol. 22, No. 4, pp. 557-570.
- Bahgat, G.** (1997) *The Gulf Monarchies: New Economic and political Realities*. The Research Institute for the Study of Conflict.
- Baker, D.** (1986) *The Traditional House and New Middle Class Housing in Morocco*, Ekistics, Vol. 318, May/ June, pp. 149-156.
- Balchin, P. And Rhoden, M.** (2001) *Housing Policy: An Introduction*. Routledge, London and New York.
- Barakat, H.** (1993) *The Arab World: Society, Culture and State*. University of California Press, Berkeley, USA.
- Barelli, J.** (1992) *Underoccupation in Local Authority and Housing Association*, HMSO, London.
- Barlow, J. and Duncan, S.** (1992) *Markets, States and Housing Provisions in Four European Growth Regions*. Progress in Planning, Vol. 38, Part 2.
- Barnett, R. and Lowe, S.** (1990) *Measuring Housing Need and the Provision of Social Housing*. Housing Studies. Vol. 5 No. 3, pp. 184-194.
- Barry, N.** (1998) *The Economics of the Welfare State*. Oxford University Press.
- Barry, N.** (1999) *Neoclassicism, the New Right and British Social Welfare*. In: Page, R. and Silburn, R. British Social Welfare in the Twentieth Century. Macmillan, London.



- Batten, D.** (1999) *The Mismatch Argument: The Construction of a Housing Orthodoxy in Australia*. Urban Studies, Vol. 36, No. 1, pp. 137-151.
- Beardon, W., Netemyer, R. and Teel, J.** (1989) *Measurement of Consumer Susceptibility to Interpersonal Influence*. Journal of Consumer Research. Vol. 15, March.
- Beatley, T.** (2000) *Green Urbanism: Learning from Europe*. Island Press.
- Belk, R.** (1988) *Possessions and the Extended Self*. Journal of Consumer Research. Vol. 15, September, pp. 139-164.
- Ben Sandel, O.** (2002) *Traditional Sayings and Riddles of the United Arab Emirates*. (in Arabic), Zayed Centre for Heritage and History, Al-Ain, Abu Dhabi.
- Benjamin, D., Stea, D. and Saile, D. (editors)** (1995) *The Home: Words, Interpretations, Meanings and Environments*. Avebury, Aldershot, USA.
- Bernheim, D.** (1984) *A Theory of Conformity*. Journal of Political Economy, Vol. 102, No. 5, pp. 841- 877.
- Beyer, G.** (1965) *Housing and Society*. The Macmillan Company, New York.
- Binder, M. and Pesaran, H.** (2001) *Life-Cycle Consumption Under Social Interactions*. Journal of Economic Dynamics & Control. Vol. 25, pp. 35-83.
- Bisin, A. and Verdier, T.** (1998) *On the Cultural Transmission of Preferences for Social Status*. Journal of Public Economics, Vol. 70, pp. 7597.
- Black, J. and Hoben, J.** (1985) *Land price Inflation and Affordable Housing*. Urban Geography, Vol. 6, No. 1, pp. 27-47.
- Black, J.** (2002) *Oxford Dictionary of Economics*. Oxford University Press, Oxford and New York.
- Black, J. and Stafford, D.** (1988) *Housing Policy and Finance*. Routledge, London and New York.
- Black, T.** (1998) *Doing Quantitative Research in Social Sciences*. SAGE Publishing, London.
- Blaikie, N.** (2003) *Analyzing Quantitative Data: From Description to Explanation*. SAGE Publications, London.
- Blakemore, K.** (1982) *Social Policy: An Introduction*. Open University Press.
- Blalock, H.** (1991) *Are there any Constructive Alternatives to Causal Modeling*. Sociological Methodology. Vol. 21, pp. 325-335.



**Blanc, D.** (2001) *The Effect of Public Social Housing on Households' Consumption in France*. Journal of Housing Economics, Vol. 10, pp. 429-455.

**Blaxter, L., Hughes, C. and Tight, M.** (1997) *How to Research*. Open University Press.

**Blythe, J.** (1997) *The Essence of Consumer Behaviour*. Prentice Hall, London and New York.

**Bogdon, A. and Can, A.** (1997) *Indicators of Local Housing Affordability: Comparative and Spatial Approaches*. Real Estate Economics. Vol. 25 No. 1, pp. 43-62.

**Bonine, M.** (1981) *The Urbanization of the Persian Gulf*. Pp. 225-278. In Cottrell, A. John Hopkins University Press, Baltimore and London.

**Boulton, D. and Hammersley, M.** (1998) *Analysis of Unstructured Data*. Pp. 282-297. In, Sapsford and Jupp. Sage Publications.

**Bradshaw, J.** (1972) *The Concept of Social Needs*. New Society (30 March).

**Bradshaw, J. and Finch, N.** (2001) *Core Poverty*. A seminar paper presented at Centre for the Analysis of Social Exclusion, LSE, London, 7 March, 2001.

**Bramley, G., Bartlett, W. and Lambert, C.** (1995) *Planning, the Market and Private Housebuilding*. University College London Press.

**Branch, E.** (1993) *Short Run Income Elasticity of Demand for Residential Electricity: Using Consumer Expenditure Survey Data*. The Journal of Energy. Vol. 14, No. 4, pp. 111-121.

**Bratt, R.** (2002) *Housing and Family Well-being*. Housing Studies, Vol. 17, No. 1, pp. 13-26.

**Brekke, K., Howarth, R. and Nyborg, K.** (2003) *Status-Seeking and Material Affluence: Evaluating the Hirsch Hypothesis*. Ecological Economics, Vol. 45, pp. 29-39.

**Bristol, T. and Fern, E.** (1993) *Using Qualitative Techniques to Explore Consumer Attitudes: Insights From Group Process Theories*. Advances in Consumer theories. Vol. 20, pp. 444-448.

**Bryce, W. and Olney, T.** (1991) *Gender Differences in Consumption Aspirations: A Cross-Cultural Appraisal*. Journal of Social Behavior and Personality. Vol. 11, No. 4, pp. 237-253.

**Bryman, A.** (2001) *Social Research Methods*. Oxford University Press.

**Bryman, A. and Cramer, D.** (1990) *Quantitative Data Analysis for Social Scientists*. ROUTLRDGE, London and New York.



**Bull, J. (1993)** *Life Cycle Costing for Construction*. Blackie Academic & Professions, London, New York.

**Bulloch, J. (1984)** *The Gulf: A portrait of Kuwait, Qatar, Bahrain and the UAE*. Century Publishing, London.

**Bulos, M. and Teymur, N. (editors) (1993)** *Housing: Design, Research, Education*. Avebury, Aldershot, Hong Kong and Singapore.

**Burnkrant, R. and Cousineau, A. (1975)** *Informational and Normative Social Influence in Buyer Behavior*. Journal of Consumer Research. Vol. 2, December, pp. 206-215.

**Burns, L. and Grebler, L. (1977)** *The Housing of Nations: Analysis and Policy in a Comparative Framework*. The Macmillan Press.

**Business in Dubai (2001)** *Consumer Protection: Awareness is First*. Volume 1, No. 5, pp. 34-39. (In Arabic).

**Business in Dubai (2001)** *Reduced Consumer Awareness Between the Absence of Legislation and Lack of Enforcement*. Vol. 1, No. 3, pp. 38-41. (In Arabic).

**Byman, D. and Green, J. (1999)** *The Enigma of Political Stability in the Persian Gulf Monarchies*. Middle East Review of International Affairs, Vol. 3, No. 3, pp. 20-37.

**Cadwallader, M. (1992)** *Migration and Residential Mobility: Macro and Micro Approaches*. The University of Wisconsin Press.

**Cadwallader, M. (1985)** *Analytical Urban Geography: Spatial Patterns and Theories*. Prentice-Hall Inc. New Jersey.

**Cameron, C. (1999)** *Room Size, Organization of Construction, and Archeological Interpretation in the Puebloan Southwest*. Journal of Anthropological Archeology, Vol. 18, pp. 201-239.

**Campbell, C. (1995)** *Conspicuous Confusion? A Critique of Veblen's Theory of Conspicuous Consumption*. Sociological Theory, Vol. 13, No. 1 (March), pp. 37-47.

**Campbell, C. (1995)** *The Sociology of Consumption*. pp. 96-126, in: Acknowledging Consumption: A Review of New Studies, edited by, Miller, D. Routledge, London and New York.

**Carmon, M. (1999)** *Residential Design Policy and Guidance: Content, Analytical Basis, Prescription and Regional Emphasis*. Planning Practice and Research, Vol. 14, No. 1, pp. 17-38.

**Carsten, J. and Hugh-Jones, S. (1995)** *About the House: Levi-Strauss and Beyond*. Cambridge University Press.



**Chan, S.** (2001) *Spatial Lock-in: Do Falling House Prices Constrain Residential Mobility*. *Journal of Urban Economics*, Vol. 49, pp. 567-586.

**Chapman, D.** (1955) *The Home and Social Status*. Routledge & K. Paul Ltd. London.

**Charles, S.** (1977) *Housing Economics*. Macmillan, London and New York.

**Cheshire, P. and Sheppard, S.** (1989) *British Planning Policy and Access to Housing: Some Empirical Estimates*. *Urban Studies*, 22, pp. 469-485.

**Clapham, D., Kemp, P. and Smith, S.** (1990) *Housing and Social Policy*. Macmillan. London.

**Clark, R. and Goldsmith, R.** (2005) *Market Mavens: Psychological Influences*. *Psychology and Marketing*. Vol. 22 (4), pp. 289-312.

**Clark, W., Deurloo, M. and Dieleman, F.** (2000) *Housing Consumption and Residential Crowding in U.S. Housing Markets*. *Journal of Urban Affairs*, Vol. 22, No. 1, pp. 49-63.

**Clark, W., Deurloo, M. and Dieleman, F.** (1984) *Housing Consumption and Residential Mobility*. *Annals of the American Geographers*, Vol. 74, No. 1, pp. 29-43.

**Clark, W. and Drever, A.** (2000) *Residential Mobility in a Constrained Market: Implications for Ethnic Population in Germany*. *Environment and Planning*, Vol. 32, pp. 833-846.

**Clark, W. and Huang, Y.** (2003) *The Life Course and Residential Mobility in British Housing Markets*. *Environment and Planning*, Vol. 35, pp. 323-339.

**Clark, W. and Moore, E. (editors)** *Residential Mobility and Public Policy*. Sage Publications, Beverly Hills and London.

**Clark, W. and Onaka, J.** (1983) *Life Cycle and Housing Adjustment as Explanations of Residential Mobility*. *Urban Studies*, Vol. 20, pp. 47-57.

**Clauson-Kaas, J., Dzikus, A., Stephens, C., Hojlyng, N. and Aaby, P.** (1996) *Urban Health: Human Settlement Indicators of Crowding*. *Third World Planning Review*, Vol. 18, No. 3, pp. 349-363.

**Clayton, S.** (1985) *Social Need Revisited*. *Journal of Social Policy*. Vol. 12, No. 2, pp. 215-234.

**Collis, J. and Hussey, R.** (2003) *Business Research: A Practical Guide for Undergraduate and Postgraduate Students*. Palgrave Macmillan.

**Colloredo-Mansfeld, R.** (1994) *Architectural Conspicuous Consumption and Economic Change in the Andes*. *American Anthropologist*, Vol. 96, pp. 845-865.



- Connolly, J. and Prothero, A. (2003)** *Sustainable Consumption: Consumption, Consumers and the Commodity Discourse*. Consumption, Markets and Culture, Vol. 6, No. 4, pp. 275-291.
- Cooper, C. (1976)** *The House as Symbol of the Self*. In, Proshansky, H., Ittelson, W. and Rivlin, L. (editors). Environmental Psychology: People and Their Physical Settings. Holt, Rinehart and Winston, New York and Chicago.
- Corneo, G. and Jeanne, O. (1998)** *Social Organization, Status and Savings Behavior*. Journal of Public Economics, Vol. 70, pp. 37-51.
- Corneo, G. and Jeanne, O. (1997)** *Conspicuous Consumption, Snobbism and Conformism*. Journal of Public Economics, Vol. 66, pp. 55-71.
- Corrigan, P. (1997)** *The Sociology of Consumption: An Introduction*. SAGE Publications. London, Thousands Oak, New Delhi.
- Coser, R. (1961)** *Insulation from Observability and Types of Social Conformity*. American Sociological Review, Vol. 26, No. 1, pp. 28-39.
- Cottrell, A. (Editor) (1981)** *The Persian Gulf States: A General Survey*. John Hopkins University Press, Baltimore and London.
- Creswell, J. (2003)** *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Sage Publications, London.
- Croome, D. (1991)** *The Determinant of Architectural Form in Modern Buildings within Arab World*. Building and Environment, Vol. 26, No. 4, pp. ???
- Cross Border Legal Publishing (2004)** *Dubai Property Investment Guide*. Issue 1, Emirates Printing Press, Dubai, UAE.
- Crystal, J. (1995)** *Oil and Politics in the Gulf: Rulers and Merchants in Kuwait and Qatar*. Cambridge University Press.
- Crystal, J. (1992)** *Kuwait: the Transformation of and Oil State*. Westview Press, Boulder, San Francisco and Oxford.
- Csikszentihalyi, M. (2002)** *The Cost and Benefits of Consuming*. Journal of Consumer Research. Vol. 27, September, pp. 267-272.
- Csikszentihalyi, M. and Rochberg-Halton, E. (1981)** *The Meaning of Things, Domestic Symbols and the Self*. Cambridge University Press.
- Cullingworth, J. (1979)** *Essays on housing Policy*. George Allen & Unwin, London, Boston and Sydney.
- Daniell, J. and Struyk, R. (1997)** *The Evolving Housing Market in Moscow: Indicators of Housing Reform*. Urban Studies, Vol. 34, No. 2, pp. 235-254.



- De Atkin, N.** (2000) *Why Arabs Lose Wars*. Middle East Review of International Affairs. Vol. 4, No. 1. pp.16-27.
- De Mooij, M.** (2004) *Consumer Behavior and Culture: Consequences for Global Marketing and Advertising*. Sage Publications Inc. Thousands oaks, California, USA.
- De Vaus, D.** (2002) *Surveys in Social Research*. Routledge.
- De Vaus, D.** (2001) *Research Design in Social Research*. Sage Publications, London, Thousand Oaks and New Delhi.
- Deane, G.** (1990) *Mobility and Adjustment: Paths to the Resolution of Residential Stress*. Demography, Vol. 27, No. 1, February, pp. 65-77.
- Deaton, A.** (1992) *Understanding Consumption*. Clarendon Press, Oxford.
- Deutsch, M. and Gerard, H.** (1955) *A Study of Normative and Informational Social Influence Upon Individual Judgment*. Journal of Abnormal and Social Psychology. Vol. 51, pp. 629-636.
- Dieleman, F.** (2001) *Modeling Residential Mobility; A review of recent Trends in Research*. Journal of Housing and the Built Environment, Vol. 16, pp. 249-265.
- DiPasquale, D.** (1996) *The Economics of Housing Subsidies*. National Community Development Initiative Seminar, October 17, 1996, New York, USA.
- Dittmar, H.** (1992) *The Social Psychology of Material Possessions: To Have is to be*. Hertfordshire, Harvester Wheatsheaf.
- Doebele, W.** (1987) *Land Policy*. Pp. 110-132. In Rodwin, L. Shelter, Settlement and Development. Allen & Unwin, London, Sydney and Wellington.
- Doling, J.** (1997) *Comparative Housing Policy: Government and Housing in Advanced Industrialized Countries*. Macmillan Press Ltd.
- Douglas, M.** (1996) *Thought Style: Critical Essays of Good Taste*. Sage Publications, London, New York.
- Douglas, M. and Isherwood, B.** (1996) *The World of Goods: Towards Anthropology of Consumption*. Routledge, London and New York.
- Downs, A.** (1993) *Reducing Regulatory Barriers to Affordable Housing by Local Governments*. In, Kingsley, T. and Turner, M. Housing Markets and Residential Mobility, Urban Institute Press. Washington, D.C.
- Downs, A.** (1992) *Creating More Affordable Housing*. Journal of Housing. Vol. 49, No. 4, pp. 174-187.
- Doyal, L. and Gough, I.** (1991) *A Theory of Human Need*. MACMILAN.



- Drakakis-Smith, D. (1981)** *Urbanization, Housing and the Development Process*. Croom Helm Ltd. London.
- Drakakis-Smith, D. (1987)** *The Third World City*. METHUEN, London and New York.
- Dubai Municipality (1963)** *Dubai Municipality Guide- 1961-1963*. Kuwait Government Print. (in Arabic).
- Dubai Municipality (1986)** *Dubai Emirate Comprehensive Development Plan*.
- Dubai Municipality (1993)** *Dubai Urban Area Structure Plan*.
- Dubai Municipality (1999)** *Results of Income and Expenditure Survey- 1997-1998*.
- Dubai Municipality (2000 a)** *Comprehensive Statistical Survey of Dubai Emirate- Socioeconomic Survey*.
- Dubai Municipality (2000 b)** *Comprehensive Statistical Survey of Dubai Emirate- Total Population and Characteristics of Buildings, Housing and Establishments*.
- Dubai Municipality (2000 c)** *Local Orders Regulating the Practice of Engineering Consultancy Profession*.
- Dubai Municipality (2003)** *Dubai Emirate Statistical Yearbook*.
- Dubai Municipality (2001)** *Dubai Emirate Building Codes*. Dubai Municipality Publications.
- Dubai Municipality (2000)** *Comprehensive Statistical Survey, Emirate of Dubai: Total Population & Characteristics of Buildings, Housing & Establishments*. Dubai Municipality Publications.
- Dubai Municipality (2000)** *Comprehensive Statistical Survey, Emirate of Dubai: Socio-Economic Survey*. Dubai Printing Press.
- Dubai Municipality (1999)** *Results of Income & Expenditure Survey: Dubai City- 1997-1998*. Dubai Printing Press.
- Duck-Anthony, J. (1975)** *Arab States of the Lower Gulf: People, Politics, and Petroleum*. The Middle East Institute, Washington, D. C.
- Duncan, J. (1985)** *Housing The House as Symbol of Social Structure*. Pp. 133-150. In Altman and Werner- Home Environments, Plenum, New York and London.
- Duncan, J. (editor) (1981)** *Housing and Identity: Cross-cultural Perspectives*. Croom Helm, London.



- Eastman, J., Goldsmith, R. and Flynn, L. (1999) *Status Consumption in Consumer Behaviour: Scale Development and Validation*. Journal of Marketing Theory and Practice. 7, 41, 41-52.
- Economist Intelligence Unit (EIU) (2004) *Database: Population Dynamics*. Business Middle East, July 1<sup>st</sup>-15<sup>th</sup>.
- Economist Intelligence Unit (EIU) (2005) *The Dynamics of Democracy in the Middle East*. Special Report.
- Edin, P. and Englund, P. (1991) *Moving Cost and Housing Demand: Are Recent Owners Really in Equilibrium?* Journal of Public Economics, Vol. 44, pp. 299-320.
- Ekins, P. (ed.) (1986) *The Living Economy: A new Economics in Making*. Routledge, London and New York.
- El-Azhary, M. (editor), (1981) *The Impact of Oil Revenues on Arab Gulf Development*. Croom Helm, London and Sydney.
- El-Ghonemy, R. (1998) *Affluence and Poverty in the Middle East*. Routledge. London and New York.
- El-hiraika, A. and Hamed, A. (2002) *Explaining Growth in an Oil-Dependent Economy: the Case of the United Arab Emirates*. A revised version of a paper presented at Workshop on Global Research Project, Rio de Janeiro, Brazil Dec. 13-14, 2002.
- Elliot, R. (1997) *Existential Consumption and Irrational Desire. (Postmodern Marketing)*. European Journal of Marketing, Vol. 31, Issue 3, pp. 285-292.
- El-Mallakh, R. (1981) *The Economic Development of the United Arab Emirates*. Croom Helm, London.
- Emirates Today Daily English Newspaper (29/9/2005; 5/9/2005; 1/3/2006; 29/12/2006)
- Epley, N. and Gilovich, T. (1999) *Just Going Along: Nonconscious Priming and Conformity to Social Pressure*. Journal of Experimental Social Psychology. Vol. 35, pp. 578-589.
- Ermisch, J. and Jenkins, S. (1999) *Retirement and Housing Adjustment in Later Life: Evidence from the British Household Panel Survey*. Labour Economics, Vol. 6, pp. 311-333.
- Etter, J. and Perneger, T. (2000) *Snowball Sampling by Mail: Application to a Survey of Smokers in the General Population*. International Journal of Epidemiology. Vol. 29, pp. 43-48.
- Evans, A. (1991) *'Rabbit Hutches on Postage Stamp': Planning, Development and Political Economy*. Urban Studies, Vol. 28, No. 6, pp. 853-870.



**Exertzoglou, H.** (2003) *The Cultural Uses of Consumption: Negotiating Class, Gender, and Nation in the Ottoman Urban Centers During the 19<sup>th</sup> Century*. International Journal of Middle East Studies. Vol. 35, pp. 77-101.

**Ezz Al Din, M.** (1990) *Housing Development in Kuwait: A review of Policy Implications*. Open House International, Vol. 15, No. 1, pp. 50-54.

**Fadan, Y.** (1983) *The Development of Contemporary Housing in Saudi Arabia (1950-1983): A Study in Cross-Cultural Influence Under Conditions of Rapid Change*. Unpublished Ph.D. Thesis, Massachusetts Institute of Technology.

**Farman, A.** (1982) *An Initial Report on Housing in the UAE: An Analytical Synopsis of the Housing Situation*. United Nations Assistance, Ministry of Public Works and Housing (unpublished Report).

**Faugier, J. and Sargeant, M.** (1997) *Sampling Hard to Reach Population*. Journal of Advanced Nursing. Vol. 26, pp. 790-797.

**Federal Law No. 10** (1999) *For the Establishment of Sheikh Zayed Housing Programme*. (In Arabic).

**Fenelon, K.** (1973) *The United Arab Emirates: An Economic and Social Survey*. Longman.

**Ferchiou, R.** (1982) *The Indirect Effects of New Housing Construction in Developing Countries*. Urban Studies, Vol. 19, pp. 167-176.

**Ferguson, T. and Crowley, S.** (1997) *Gender Differences in Organization of Guilt and Shame*. Sex Roles. Vol. 37, Issue 112, pp. 19-44.

**Fershtman, C. and Weiss, Y.** (1998) *Social Rewards, Externalities and Stable Preferences*. Journal of Public Economics, Vol. 70, pp. 53-73.

**Fine, B. and Leopold, E.** (1993) *The World of Consumption*. Routledge, London and New York.

**Fisher, L. and Jaffe, A.** (2003) *Determinants of International Home Ownership Rates*. Housing Finance International. September, pp. 34-38

**Fisher, R. and Price, L.** (1992) *An Investigation into the Social Context of Early Adoption Behavior*. Journal of Consumer Research. Vol. 19, December, pp. 477-486.

**Fitzpatrick, T.** (2001) *Welfare Theory: An Introduction*, Palgrave.

**Fitzpatrick, T.** (2005) *New Theories in Welfare*. Palgrave.

**Flanagan, R., Norman, G., Meadows, J. and Robinson, G.** (1989) *Life Cycle Costing: Thoery and Practice*. BSP Professional Books, Oxford and London.



**Flint, J. and Rowlands, R.** (2003) *Commodification, Normalisation and Intervention: Cultural, Social and Symbolic Capital in Housing Consumption and Governance*. Journal of Housing and the Built Environment, Vol. 18, pp. 213-232.

**Flood, J.** (1997) *Urban and Housing Indicators*. Urban Studies, Vol. 34, No. 10, pp. 1635-1665.

**Foley, S.** (1999) *The UAE: Political Issues and Security Dilemmas*. Middle East Review of International Affairs. Vol. 3, No. 1, March, pp. 25-45.

**Follain, J., Lim, G. and Renaud** (1982) *Housing Crowding in Developing Countries and Willingness to Pay for Additional Space*. Journal of Development Economics, Vol. 11, pp. 249-272.

**Foote, N., Abu-Lughod, J., Foley, M. and Winnick, L.** (1960) *Housing Choices and Housing Constraints*. McGraw-Hill Book Company, New York, Toronto and London.

**Foster, P.** (1998) *Observational Research*. Pp. 58- 93. In Sapsford and Jupp. Data Collection and Analysis, Sage Publications.

**Frank, K.** (1985) *New Households, Old Houses: Designing for changing Needs*. Ekistics, Vol. 310, January/ February.

**Franklin, B.** (2001) *Discourses of Design: Perspectives on Meaning of Housing Quality and 'Good' Housing Design*. Housing, Theory and Society, Vol. 18, pp. 79-92.

**Friedman, A.** (1997) *Design for Flexibility and Affordability: Learning from Post-War Home*. Journal of Architectural and Planning Research, Vol. 14, No. 2, pp. 150-170.

**Furbey, R. and Goodchild, B.** (1986) *Methods and Methodology in housing User Research*, Housing Studies. Vol. 1, No. 3, pp. 166-181.

**Furnham, A.** (1984) *Studies of Cross-cultural Conformity: A Brief and Critical Review*. Psychologia, Vo. 72, pp. 65-72.

**Gause, F. G III.** (2000) *The Persistence of Monarchy in the Arabian Peninsula: A comparative Analysis*. Pp. 167- 186. In Kostiner, J. (editor) *Middle East Monarchies: The Challenges of Modernity*. Lynne Rienner Publishers, Boulder and London.

**George, V. and Wilding, P.** (1984) *The Impact of Social Policy*. Routledge, London and New York.

**George, V. and Wilding, P.** (1976) *Ideology and Social Welfare*. Routledge and Kegan Paul.

**Ghanem, S.** (1992) *Industrialization in the United Arab Emirate*. Averbury, Newcastle upon Tyne, UK.



- Ghareeb, E. and Al Abed, I. (Editors), (2000) *Perspectives on the United Arab Emirates*.
- Gibb, K. and Munro, M. (1991) *Housing Finance in the UK*. MACMILLAN, London.
- Gilbert, A. (1999) *A Home is for ever? Residential Mobility and Homeownership in Self-Built Settlements*. *Environment and Planning A*, Vol. 31, pp. 1073-1091.
- Gilbert, P. (2003) *Evolution, Social Roles, and the Differences in Shame and Guilt*. *Social Research*, Vol. 70, No. 4, Winter, pp. 1205-1228.
- Glass, R. and Westergaard, J. (1965) *London's Housing Needs*. Centre for Urban Studies, University College London.
- Glennie, P. (1998) *Consumption, Consumerism and Urban Form: Historical Perspectives*. *Urban Studies*, Vol. 35, Nos. 5-6, pp. 927-951.
- Glickman, L. (editor) (1999) *Consumer Society in American History: A Reader*. Cornell University Press, Ithaca and London.
- Goffman, E. (1959) *The Presentation of Self in Everyday Life*. Doubleday and Company, Inc. Garden City, New York.
- Goodchild, B. (1997) *Housing and the Urban Environment: A Guide to Housing Design, Renewal and Urban Planning*. Blackwell Science.
- Goodin, R. (1988) *Reasons for Welfare: The Political Theory of the Welfare State*. Princeton University Press.
- Goodman, A. (1995) *A Dynamic Equilibrium Model of Housing Demand and Mobility with Transactions Costs*. *Journal of Housing Economics*, Vol. 4, pp. 307-327.
- Goodman, J. (1976) *Housing Consumption Disequilibrium and Local Residential Mobility*. *Environment and Planning*, Vol. 8, pp. 855-874.
- Gosling, J., Keogh, G. and Stabler, M. (1993) *House Extensions and Housing market Adjustment: A Case-study of Wokingham*. *Urban Studies*, Vol. 30, No. 9, pp. 1561-1576.
- Gough, I. (2002) *Lists and Thresholds: A comparison of our Theory of Human Need with Naussbaum's Capabilities Approach*. Conference at St. Edmund's College 9-10 September, Cambridge University.
- Gough, I. and Thomas, T. (1994) *Need Satisfaction and Welfare Outcomes: Theory and Explanations*. *Social Policy and Administration*. Vol. 28, No. 1, pp. 33-51
- Gram-Hanssen, K. and Bech-Danielsen, C. (2004) *House, Home and Identity from a Consumption Perspective*. *Housing, Theory and Society*. Vol. 21, pp. 17-26.



- Grigsby, W. and Bourassa, S. (2003)** *Trying to Understand Low-income Housing Subsidies: Lessons from the United States*. Urban Studies, Vol. 40, Nos 5-6, pp. 973-992.
- Grilo, I., Shy, O. and Thisse, J. (2001)** *Price Competition When Consumer Behavior is Characterized by Conformity or Vanity*. Journal of Public Economics, Vol. 80, pp. 385-408.
- Grinblatt, M., Keloharju, M. and Ikaheimo, S. (2003)** *Interpersonal Effects in Consumption: Evidence from Automobile Purchases of Neighbors*. A paper published by the Finish Foundation for Economic Education, September 30, 2003.
- Gronow, J. (1997)** *The Sociology of Taste*. Routledge, London and New York.
- Gugler, J. (editor), (1988)** *The Urbanization of the Third World*. Oxford University Press.
- Gulf Construction (2002)** *ABM Builds the Landmark Project*. January, pp. 84-85.
- Gulf News English Daily Newspaper (30/1/2005; 12/1/2005; 29/3/2005; 28/3/2005; 11/8/2004;)**
- Gyourko, J. and Voith, R. (1997)** *Does the U.S. Tax Treatment of Housing Promote Suburbanization and Central City Decline*. Working Paper No. 97-13, The Federal Reserve Bank of Philadelphia.
- Halliday, F. (1984)** *Labor Migration in the Arab World*. Middle East Report, No. 123, May, pp. 3-10.
- Hamilton, C. (2002)** *Over-consumption in Australia: The Rise of the Middle-Class Battler*. Discussion Paper Number 49. The Australia Institute.
- Hammad, R. (1997)** *Islamic Legislation in Land Use & Planning and its Effect on Architecture Style*. Open House International, Vol. 22, No. 2, pp. 54-59.
- Han, J. and Baum, S. (2002)** *Residential Mobility in the Seoul Metropolitan Region: Who, Where and Why?* The International Scope Review, Vol. 4, Issue 8 (Winter), pp. 1-20.
- Hansen, E. and Gottschalk, G. (2006)** *What Makes Older People Consider Moving House and What Makes Them Move?* Housing, Theory and Society, Vol. 23, No. 1, pp. 34-54.
- Hansen, U. and Schrader, U. (1997)** *A Modern Model of Consumption for a Sustainable Society*. Journal of Consumer Policy. Vol. 20, pp. 443-468.
- Hardy, J. and Satterthwaite, D. (1981)** *Shelter, Need and Response*. John Wiley and Sons, Chichester, New York.



- Harris, P. and Brown, B. (1996) *The Home and Identity Display: Interpreting Resident Territoriality from Home Exteriors*. Journal of Environmental Psychology, Vol. 16, pp. 187-203.
- Harris, R. and Larkham, P. (editors), (1999) *Changing Suburbs: Foundation, Form and Function*. Taylor and Francis Group.
- Hayden, D. (1984) *Redesigning the American Dream: The Future of Housing, Work and Family*. W.W. Norton and Company, New York and London.
- Hawley, D. (1971) *The Trucial States*. George Allen & Unwin Ltd. London.
- Heard-Bey, F. (1982) *From Trucial States to the United Arab Emirates: A Society in Transition*. Longman, London.
- Hearn, J. and Roseneil, S. (editors), (1991) *Consuming Cultures: Power and Resistance*. Macmillan, London.
- Heller, A. (2003) *Five Approaches to the Phenomenon of Shame*. Social Research, Vol. 70, No. 4, Winter, pp. 1015-1031.
- HMSO (2001) *Living in Britain: Results from the 2000/01 General Household Survey*. [www.statistics.gov.uk/lib](http://www.statistics.gov.uk/lib).
- Hoek-Smit, M. and Diamond, D. (2003) *Subsidies for Housing Finance*. A Report presented at the World Bank Seminar on Housing Finance in Emerging Markets, March 2003. Washington D. C.
- Hofstede, G. (2001) *Culture's Consequences: Comparing Values, Behaviors, Institutions, and Organizations Across Nations*. Sage Publications, Thousand Oaks, London, New Delhi.
- Hogan, P. (2001) *The Culture of Conformism: Understanding Social Consent*. Duke University Press, Durham and London.
- Hogg, M. and Abrams, D. (1999) *Social Identifications: A Social Psychology of Inter-group Relations and Group Processes*. Routledge, London.
- Hole, W. and Pountney, M. (1971) *Trends in Population, Housing and Occupancy Rates 1861-1961*. Her Majesty's Stationary Office.
- Holt, D. (1995) *How Consumers Consume: A Typology of Consumption Practices*. Journal of Consumer Research, Vol. 22, June, pp. 1-16.
- Hosker, I. (2002) *Social Statistics: Data Analysis in Social Science Explained*. Studymates Limited, Glasgow.
- Howes, D. (editor), (1996) *Cross-Cultural Consumption: Global Markets, Local Realities*. Routledge, London and New York.



**HSBC (2003)** *United Arab Emirates Business Profile*. The Hongkong and Shanghai Banking Corporation Limited.

**HSBC (2004)** *United Arab Emirates- Eleventh Edition, Fourth Quarter, 2004*. [www.hsbc.com/businessprofiles](http://www.hsbc.com/businessprofiles).

**Huang, Y. (2003)** *A Room of One's Own: Housing Consumption and Residential Crowding in Transitional urban China*. *Environment and planning*, Vol. 35, pp. 591-614.

**Huang, Y. and Clark, W. (2002)** *Housing Tenure Choice in Transitional Urban China: A Multilevel Analysis*. *Urban Studies*. Vol. 39, No. 1, pp. 7-32.

**Hui, E. (1999)** *Willingness to Pay for Better Housing in Hong Kong: Theory and Evidence (of Dwelling Space)*. *Urban Studies*, Vol. 36, No. 2, pp. 289-304.

**Hulchanski, D. (1995)** *The Concept of Housing Affordability: Six Contemporary Uses of the Housing Expenditure-to-Income Ratio*. *Housing Studies* 10 (4) pp. 471-491.

**Humphery, C. (1997)** *The Villas of the 'New Russians': A Sketch of Consumption and Cultural Identity in Post-Soviet Landscape*. *Focaal*, Vol. 30/31, pp. 85-106.

**Idris, M. (1998)** *Assessment of the Factors Influencing the Maintenance Programme of a Large University Building in Riyadh*. *Construction Management and Economics*, Vol. 16, pp. 673-679.

**International Monetary Funds (2004)** *United Arab Emirates: Statistical Appendix*. IMF Publication Services, Washington D.C.

**Ireland, N. (1998)** *Status-seeking, Income Taxation and Efficiency*. *Journal of Public Economics*, Vol. 70, pp. 99-113.

**Iyengar S. and Brockner, J. (2001)** *Cultural Differences in Self and the Impact of Personal and Social Influences*. Pp. 13-32. In Wosinska, et al.

**Izzard, M. (1979)** *The Gulf: Arabia's Western Approaches*. John Murray.

**Jakka, A. (2004)** *Client-Quality Dimensions: Empirical Evidence from the Public Sector of the United Arab Emirates*. *Public Organization Review*, Vol. 4, pp. 239-257.

**James, J. (1987)** *Positional Goods, Conspicuous Consumption and International Demonstration Effect Reconsidered*. Vol. 15, Issue 4, pp. 449-462.

**Jenaideb, A. (1993)** *Dwelling and Dwellers of a Contemporary Madina*. Unpublished Ph.D. Thesis, University of Strathclyde.

**Jin, J. (1993)** *Homes as Expression of Identity*. In Bulos and Teymur (editors). *Housing: Design, Research, Education*, pp. 181-193.

**Johnson, A. (2003)** *The Blackwell Dictionary of Sociology: A User's Guide to Sociological Language*. Blackwell Publishing.



**Joint Center For Housing Studies of Harvard University (2003)** *The State of the Nation's Housing*. Harvard University, Cambridge, U.S.A.

**Jones, S. (1992)** *The Economics of Conformism*. Basil Blackwell.

**Jordan, T. and Kaups, M. (1987)** *Folk Architecture in Cultural and Ecological Context*. The Geographical Review, Vol. 77, pp. 52-75.

**Kanemoto, Y. (1997)** *The Housing Question in Japan*. Regional Science and Urban Economics, Vol. 27, pp. 613-641.

**Karn, V. (1973)** *Housing Standards and Costs: A Comparison of British Standards and Costs with those in the U.S.A, Canada, and Europe*. Centre for Urban and Regional Planning, The University of Birmingham.

**Kaufman, G. (1993)** *The Psychology of Shame: Theory and Treatment of Shame-Based Syndromes*. Routledge.

**Kay, S. and Zandi, D. (1991)** *Architectural Heritage of the Gulf*. Motivate Publishing, Dubai.

**Kazim, A. (2000)** *The United Arab Emirates, A.D. 600 to the Present: A Socio-Discursive Transformation in the Arabian Gulf*. Gulf Book Centre, Dubai, UAE.

**Kazim, A. (2005)** *Assessment of Primary Energy Consumption and its Environmental Consequences in the United Arab Emirates*. Renewable and Sustainable Energy Review. Vol. XX, pp. 1-22.

**Kazimee, B. and Hilton, K. (1987)** *Change & Tradition: Towards a Housing Model for the Eastern Province of Saudi Arabia*. Open House International, Vol. 12, No. 4, pp. 49-54.

**Keivani, R. and Werna, E. (2001)** *Modes of Housing Provision in Developing Countries*. Progress in Planning, 55, pp. 65-118.

**Kent, S. (1990)** *Domestic Architecture and the Use of Space: An Interdisciplinary Cross-cultural Study*. Cambridge University press.

**Kiesler, C. and Kiesler, S. (1969)** *Conformity*. Addison-Wesley Publishing Company, Reading, Massachusetts.

**Kilbourne, W., McDonagh, P. and Prothero, A. (1997)** *Sustainable Consumption and the Quality of Life: A Macromarketing Challenge to the Dominant Social Paradigm*. Journal of Macromarketing, (spring) pp. 4-23.

**King, D. and Hamilton, G. (1976)** *Economics in Society: A Basic Course*. London George Allen & Unwin Ltd.

**King, P. (2001)** *Understanding Housing Finance*. Routledge, London and New York.



- King, P.** (1998) *Housing, Individuals and the State: the Morality of Government Intervention*. Routledge, London and New York.
- King, P.** (1996) *The Limits of Housing Policies: A philosophical Investigation*. Middlesex University Press.
- Kingsley, G. and Turner, M.** (1993) *Housing Markets and Residential Mobility*. Urban Institute Press, Washington, D.C.
- Klaufus, C.** (2000) *Dwelling as Representation: Values of Architecture in Ecuadorian Squatter Settlement*. *Journal of Housing and the Built Environment*, Vol. 15, pp. 341-365.
- Knox, P. and Pinch, S.** (2000) *Urban Social Geography: An Introduction*. Prentice Hall, New York.
- Kostiner, J. (editor)** (2000) *Middle East Monarchies: The Challenges of Modernity*. Lynne Rienner Publisher, Boulder and London.
- Kubursi, A.** (1984) *Oil, Industrialization and Development in the Arab Gulf States*. Croom Helm. London, Sydney and Dover.
- Lai, L.** (1993) *Density Policy Towards Public Housing: A Hong Kong Theoretical and Empirical Review*. *Habitat International*, Vol. 17, No. 1, pp. 45-67.
- Lane, T. and Feins, J.** (1985) *Are the Elderly Overhoused? Definitions of Space Utilization and Policy Implications*. *The Gerontological Society of America*, Vol. 25, No. 3, pp. 243-250.
- Lansley, S.** (1979) *Housing and Public Policy*. Croom Helm London.
- Lawrence, D. and Setha, L.** (1990) *The Built Environment and Spatial Form*. *Annual Review of American Anthropology*, Vol. 19, pp. 453-505.
- Lawrence, R.** (1995) *Housing Quality: An Agenda for Research*. *Urban Studies*, Vol. 32, No. 10, pp. 1655-1664.
- Lawrence, R.** (1987) *Housing, Dwellings and Homes: Design Theory, Research and Practice*. John Wiley and Sons, Chichester, New York.
- Lawrence, R.** (1982) *Domestic Space and Society: A Cross-Cultural Study*. *Comparative Studies in Society and History*, Vol. 24, No. 1, pp. 104-130.
- Lerman, D. and Reeder, W.** (1987) *The Affordability of Adequate Housing*. *ARREUEA Journal*, Vol. 15, No. 4, pp.389-404.
- Levy, P. and Lemeshow, S.** (1999) *Sampling of Populations: Methods and Applications*. John Wiley & Sons, Inc.



- Li, S. (2004) *Life Course and Residential Mobility in Beijing, China*. Environment and Planning A. Vol. 36, pp. 27-43.
- Li, S. (2000) *Housing Consumption in Urban China: a Comparison study of Beijing and Guangzhou*. Environment and Planning, Vol. 32, pp. 1115-1134.
- Lim, G., Follain, J. and Renaud, B. (1984) *Economics of Residential Crowding in Developing Countries*. Journal of Urban Economics, Vol. 16, pp. 173-186.
- Lin, C. and Lin, S. (1999) *An Estimation of Elasticities of Consumption Demand and Investment Demand for Owner-occupied Housing in Taiwan: A two-Period Model*. International Real Estate Review, Vol. 2, No. 1, pp. 110-125.
- Linneman, P. and Megbolugbe, I. (1992) *Housing Affordability: Myth or Reality?* Urban Studies, Vol. 29, Nos. 3/4, pp. 369-392.
- Littlewood, A. and Munro, M. (1997) *Moving and Improving: Strategies for Attaining Housing Equilibrium*. Urban Studies, Vol. 34, No. 11, pp. 1771-1787.
- Littlewood, A. and Munro, M. (1996) *Explaining Disrepair: Examining Owner Occupiers' Repair and Maintenance Behaviour*, Housing Studies, Vol. 11, No. 4, pp. 503-524.
- Local Law No. 1 (1993) *For the Establishment of the Private Housing Financing Scheme*. (In Arabic).
- Long, L. (1992) *Changing Residence: Comparative Perspectives on Relationship to Age, Sex and Marital Status*. Population Studies, Vol. 46, pp. 141-138.
- Lury, C. (1996) *Consumer Culture*. Polity Press, Cambridge.
- Lux, M. (2003) *Efficiency and Effectiveness of Housing Policies in the Central and Eastern Europe Countries*. European Journal of Housing Policy. Vol 3, No. 3, pp. 243-265.
- Mabogunje, A., Hardoy, J. and Misra, R. (1978) *Shelter Provision in Developing Countries: The Influence of Standards and Criteria*. John Wiley and Sons, Chichester, New York.
- MacLennan, D. (1982) *Housing Economics*. Longman, London and New York.
- Madlener, R. (1996) *Econometric Analysis of Residential Energy Demand: A survey*. The Journal of Energy Literature. Vol. II, No. 2, pp.
- Magnus, R. (1981) *Societies and Social Change in the Persian Gulf*. Pp. 369-413. In Cottrell, A. John Hopkins University Press, Baltimore and London.
- Maher, C. (1995) *Housing Need and Residential Mobility: The Mismatch Debate in Perspective*. Urban Policy and Research, Vol. 13, No. 1, pp. 7-19.



- Makki, A. (1990) *Rashid: The Man Behind Dubai*. Graphic House Publishing, Dubai.
- Malkawi, F. and Al-Qudah, I. (2003) *The House as an Expression of Social Worlds: Irbid's Elite and their Architecture*. Journal of Housing and the Built Environment, Vol. 18, pp. 25-48.
- Mallakh, R. (1981) *The Economic Development of the United Arab Emirates*. Croom Helm, London.
- Malpass, P. and Murie, A. (1999) *Housing Policy and Practice*. Palgrave, New York.
- Malpezzi, S. (1990) *Urban Housing and Financial Markets: Some International Comparisons*. Urban Studies, Vol. 27, No. 6, pp. 971-1022.
- Mandic, S. (2001) *Residential Mobility versus 'In-place' Adjustments in Slovenia: Viewpoint from a Society 'in Transition'*. Housing Studies, Vol. 16, No. 1, pp. 53-73.
- Marc, O. (1977) *Psychology of the House*. Thames and Hudson, London.
- Markus, H. and Kitayama, S. (1991) *Culture and the Self: Implications for Cognition, Emotion and Motivation*. Psychological Review. Vol. 98, pp. 224-253.
- Martin, A. (2003) *An Experience of Teaching in the United Arab Emirates*. English Today, Vol. 19, No. 2, pp. 49-54.
- Marvasti, A. (2004) *Qualitative Research in Sociology*. Sage Publications, London.
- Marx, K. (1952) *Wage Labour and Capital*. Progress Publishers, Moscow.
- Maslow, A. (1954) *Motivation and Personality*. Harper Row, New York.
- Mason, J. (1996) *Qualitative Researching*. Sage Publications. London, Thousand oaks, New Delhi.
- Mason, R. (1981) *Conspicuous Consumption*. St. Martin's Press, New York.
- Mayo, S. (1999) *Subsidies in Housing*. Inter-American Development Bank, Washington D.C.
- Mazumdar, S. and Mazumdar, S. (2001) *Rethinking Public and Private Space: Religion and Women in Muslim Society*. Journal of Architectural and Planning Research. Vol. 18, No. 4 (Winter), pp. 302-320.
- McLeod, P. and Ellis, J. (1982) *Housing Consumption Over the Family Life Cycle: an Empirical Analysis*. Urban Studies, Vol. 19, pp. 177-185.
- Megbolugbe, I., Marks, A. and Schwartz (1991) *The Economic Theory of Housing Demand: A critical Review*. The Journal of Real Estate Research, Vol. 6, No. 3, pp. 381-393.



- Melikian, L.** (1988) *Arab Socio-Political Impact on Gulf Life-Styles*. In Pridham, B. (editor), *The Arab Gulf and the Arab World*, pp. 112- 127.
- Merrett, S.** (1984) *The Assessment of Housing Consumption Requirements in Developing Countries*. *Third World Planning Review*, Vol. 6, No. 4.
- Michelson, W.** (1970) *Man and His Urban Environment: A sociological Approach*. Addidon-Wsley Publishing Company, Menlo Park, California, London.
- Middle East Report** (1975) *United Arab Emirates*. No. 36, April, pp. 8-9.
- Miles, D. and Syagga, P.** (1987) *Building Maintenance: A Management Manual*. Intermediate Technology Publications.
- Miles, D.** (1992) *Housing Markets, Consumption and Financial Liberalization in Major Economies*. *European Economic Review*, Vol. 36, Issue 5, pp. 1093-1127.
- Miles, S. and Paddison, R.** (1998) *Urban Consumption: An Historiographical Note*. *Urban Studies*, Vol. 35, Nos. 5-6, pp. 815-823.
- Miller, D. (Editor),** (1995) *Acknowledging Consumption: A Review of New Studies*. Routledge, London and New York.
- Miller, R. and Brewer, J. (eds.)** (2003) *The A-Z of Social Research: A Dictionary of Key Social Science Research Concepts*. SAGE Publishing, London.
- Ministry of Housing and Local Government** (1961) *Homes for Today & Tomorrow-Parker Morris Report*. Her Majesty's Stationery Office, London.
- Ministry of Information and Culture- UAE** (2005) *The United Arab Emirates Yearbook*.
- Mises, L.** (1963) *Human Action: A Treatise on Economics*. Yale University Press.
- Mishra, R.** (1981) *Society and Social Policy: Theories and Practice of Welfare*. MACMILLAN, Hong Kong.
- Mitchel, C.** (1976) *Development in the Middle East: The Practice of Architecture*. *Bulletin (British Society of Middle Eastern Studies)*, Vol. 3, No. 2, pp. 89-91.
- Monk, S. and Whitehead, C.** (1996) *Land Supply and Housing: A Case-Study*. *Housing Studies*, Vol. 11, No. 3, pp. 407-421.
- Moore, E.** (1986) *Mobility Intention and Subsequent Relocation*. *Urban Geography*, Vol. 6, pp. 497-514.
- Moore, J.** (2000) *Placing Home in Context*. *Journal of Environmental Psychology*, Vol. 20, pp. 207-217.



- Morris, E. and Winter, M. (1975)** *A theory of Family Housing Adjustment*. Journal of Marriage and the Family. February, pp. 79-88.
- Morris, E. and Winter, M. (1978)** *Housing, Family and Society*. John Wiley and Sons, New York.
- Morrow-Jones, H. (1989)** *The Geography of Housing: Housing Over The Life Course*. Urban Geography, Vol. 10, No. 5, pp. 487-494.
- Moughtin, J. (1985)** *Hausa Architecture*. Ethnographica Ltd., London.
- Mumford, L. (1972)** *The City in History: Its origins, its Transformations and its Prospects*. Penguin Books.
- Munson, B. (1955)** *A Laboratory Method of Housing Research*. Marriage and Family Living. Vol. 21, No. 2, pp. 147-149.
- Murie, A. (1974)** *Housing Inequality and Deprivation*. Heinemann Educational Books, London.
- Murie, A. and Watson, C. (1976)** *Housing Policy and the Housing System*. London George Allen & Unwin Ltd.
- Myers, D., Baer, W. and Choi, S. (1996)** *The Changing Problem of Overcrowded Housing*. Journal of American Planning Association, Winter, pp. 66-76.
- Nachmias, C. and Nachmias, D. (1992)** *Research Methods in the Social Science*. Edward Arnold, London.
- Naussbaum, M. and Sen (eds.) (1993)** *The Quality of Life*. Oxford.
- Nguluma, H. (2003)** *Housing Themselves: Transformations, Modernisation and Spatial Qualities in Informal Settlements in Dar es Salaam, Tanzania*. Ph.D. Thesis, Swedish Royal Institute of Technology.
- Niblock, T. (editor) (1980)** *Social Development in the Arab Gulf*. Croom Helm, London.
- Niblock, T. (1985)** *Oil, political and Social Dynamics of the Arab Gulf*. The Arab Gulf Journal. Vol. 5, No. 1, April, pp.43-59.
- Nientied, P. and Linden, J. (1988)** *Approaches to Low-Income Housing in the Third World*. In, The Urbanization of the Third World, (editor) Gugler, J. Oxford University Press.
- Nir, A. (2004)** *A Behavioral Model of Consumption Patterns: The Effects of Cognitive Dissonance and Conformity*. Tilburg University, ISSN 0924-7815.
- Nyborg, K. (2003)** *The Impact of Public Policy on Social and Moral Norms: Some Examples*. Journal of Consumer Policy, Vol. 26, pp. 259-277.



- Oppenheim, A.** (1992) *Questionnaire Design, Interviewing and Attitude Measurement*. Pinter Publisher Ltd., London.
- Osborne, C.** (1977) *The Gulf States and Oman: Text and Photographs*. Croom Helm, London.
- Oseland, N. and Raw, G.** (1991) *Room Size and Adequacy of Space*. Building and Environment, Vol. 26, No. 4, pp. 342-347.
- Owen, R.** (1981) *The Arab Economies in the 1970s*. The Middle East Research and Information Project. October- December, pp. 3-13.
- Oxford English Dictionary** (1993) Oxford University Press.
- Oxley and Smith** (1996) *Housing Policy and Rented Housing in Europe*. E & F Spon, London.
- Oymen Gur, S.** (1988) *"Needs Research" and Interpretation in Architecture*. Ekistics, Vol. 328, January/ February.
- Ozaki, R.** (2002) *Housing as a reflection of Culture: privatized Living and Privacy in England and Japan*. Housing Studies, Vol. 17, No. 2, pp. 209-227.
- Pacione, M.** (2005) *City Profile: Dubai*. Cities, Vol. 22, No. 3, pp. 255-265.
- Page, R. and Silburn, R.** (editors) (1999) *British Social Welfare in the Twentieth Century*. MACMILLAN, London.
- Park, S.** (1998) *A Comparison of Korean and American Gift-Giving Behaviors*. Psychology and Marketing, Vol. 15, No. 6, pp.577-593.
- Patai, R.** (2002) *The Arab Mind* (revised edition). Hatherieigh Press, New York.
- Pattison, S.** (2000) *Shame: Theory, Therapy, Theology*. Cambridge University Press, Cambridge, England.
- Paul, J.** (1986) *The New Bourgeoisie of the Gulf*. Middle East Report, No. 142, Sep.-Oct., pp. 18-22.
- Payne, G.** (2001) *Urban Land Tenure Policy Options: Titles or Rights?* Habitat International, Vol. 25, pp. 415-429.
- Peck, M.** (1986) *The United Arab Emirates: A Venture in Unity*. Croom Helm, London and Sydney.
- Pennance, F.** (1977) *The Market in and Consumption of Housing*. In; The Consumer Society, edited by, Hirst, I. and Reekie, W. Tavistock Publication, London.
- Peterson, J.** (1988) *The Arab Gulf States: Steps Toward Political Participation*. Praeger, New York and London.



- Peterson, J. (2001) *Succession in the States of the Gulf Cooperation Council*. The Washington Quarterly, Vol. 24, No. 4, pp. 173-186.
- Peterson, J. (2003) *The united Arab Emirates: Economic Vibrancy and US Interest*. Asian Affairs, Vol. XXXIV, no. II, July. Pp. 137-142.
- Piketty, T. (1998) *Self-Fulfilling Beliefs About Social Status*. Journal of Public Economics, Vol. 70, pp. 115-132.
- Postlewaite, A. (1998) *Social Status, Norms and Economic Performances: The Social Basis of Interdependent Preferences*. European Economic Review. Vol. 42, pp. 779-800.
- Pridham, B. (editor) (1988) *The Arab Gulf and the Arab World*. Croom Helm, London, New York and Sydney.
- Pugh, C. (2001) *The Theory and Practice of Housing Sector Development for Developing Countries, 1950-99*. Housing Studies, Vol. 16, No. 4, pp. 399-423.
- Pugh, C. (1980) *Housing in Capitalist Societies*. Gower.
- Pusic, E. (1972) *Social Welfare and Social Development*. Mouton, the Hague and Paris.
- Quercia, R. and Rohe, W. (1993) *Models of Housing Adjustment and Their Implications for Planning and Policy*. Journal of Planning Literature, Vol. 8, No. 1, August.
- Quigley, J. (1999) *Why Should the Government Play a Role in Housing?* Housing, Theory and Society, Vol. 16, No. 4, pp. 201-203.
- Ramesh, S. (1995) *The UAE Formative Years 1965-75 A Collection of Historical Photographs*. Motivate Publishing, Dubai, UAE.
- Rao, V. and Woolcock, M. (2002) *Integrating Qualitative and Quantitative Approaches in Program Evaluation*. The World Bank Publications, Washington D.C.
- Rapoport, A. (2001) *Theory, Culture and Housing*. Housing, Theory and Society, Vol. 17, pp. 145-165.
- Rapoport, A. (1982) *The Meaning of the Built Environment: A Nonverbal Communication Approach*. Sage Publications, Beverly Hills/ London.
- Rapoport, A. (editor), (1976) *The Mutual Interaction of People and their Built Environment: A Cross Cultural Perspective*. Mouton Publishers, the Hague and Paris.
- Rapoport, A. (1968) *House Form and Culture*. Prentice Hall Inc. Englewood Cliff, N.J.



- Rashid, N.** (1987) *Dubai, Life and Times: Through the Lense of Noor Ali Rahid*. Motivate Publishing, Dubai, United Arab Emirates.
- Redmond, W.** (2000) *Consumer Rationality and Consumer Sovereignty*. Review of Social Economy, Vol. LVIII, No. 2, pp. pp. 177-196.
- Reid, M.** (1962) *Housing and Income*. The University of Chicago Press.
- Reimer, S. and Leslie, D.** (2004) *Identity, Consumption and the Home*. Home Cultures, Vol. 1, issue 2. pp. 187-208.
- Reschovsky, J.** (1990) *Residential Immobility of the Elderly: An Empirical Investigation*. AREUEA, Vol. 18, No. 2, pp. 160-178.
- Richards, A.** (2004) *Economic Reform in the Middle East: the Challenge of Governance*. Pp. 57- 128. In, *The Future Security Environment in the Middle East*, edited by, Bensahel, N. and Byman, D. Rand Corporation, Santa Monica, USA.
- Richardson, P.** (2004) *Possible Influences of Arabic-Islamic Culture on the Reflective Practices Proposed for an Education Degree at the Higher Colleges of Technology in the United Arab Emirates*. International Journal of Educational Development. Vol. 24, pp. 429-436.
- Richins, M.** (1994) *Valuing Things: The Public and Private Meanings of Possessions*. Journal of Consumer Research, Vol. 21, pp. 504-529.
- Ridley, A.** (1976) *At Home: An Illustrated History of Houses and Homes*. Cox and Wyman Ltd., London, Fakenham and Reading.
- Rivlin, P. and Even, S.** (2004) *Political Stability in Arab States: Economic causes and Consequences*. Jaffee Center for Strategic Studies. Kedem, Tel Aviv.
- Robson, C.** (2002) *Real World Research: A Resource for Social Scientists and Practitioner-Researchers*. Blackwell, London.
- Rodwin, L. (editor)** (1987) *Shelter, Settlement, and Development*. Allen & Unwin, Boston, London, Sydney and Willington.
- Rossi, P.** (1980) *Why Families Move*. (second edition) Sage Publications, Beverly Hills and London.
- Rossi, P.** (1955) *Why Families Move*. The Free Press, Glencoe, Illinois, USA.
- Rothman, R.** (2002) *Inequality and Stratification: Race, Class and Gender*. Prentice Hall, Upper Saddle River, New Jersey.
- Rowe, P.** (1995) *Modernity and Housing*. The MIT Press, Cambridge, MA, USA. and London.
- Rubinstein, D.** (1974) *Victorian Homes*. David & Charles, London.



- Rudel, T.** (1987) *Housing Price Inflation, Family Growth, and the Move from Rented to Owner Occupied Housing*. Urban Studies, Vol. 24, pp. 258-267.
- Rugh, W.** (1973) *The Emergence of a New Middle Class in Saudi Arabia*. Middle East Journal. Vol. 27, No. 1, Winter, pp. 9-21.
- Rumaihi, M.** (1978) *Bahrain: Social and Political Change Since the First World War*. Bowker, London. In association with the Centre for Middle Eastern and Islamic Studies of the University of Durham.
- Ruud, M. and Nordvik, V.** (1999) *From the Kitchen Floor to the Basement-Sharing Arrangements in Two Centuries*. Housing, Theory and Society. Vol. 16, pp. 192-200.
- Sadik, A.** (1996) *Evolution and Performance of the United Arab Emirates Economy 1972-1995*. pp. 205-227. In Ghareeb, E. and Al-Abed, I. Ridient Press.
- Sadowski, Y.** (1991) *Arab Economies After the Gulf War: Powe, Pverty, and Petrodollars*. Middle East Report, No. 170, May- June, pp. 4-7.
- Sagy, S., Orr, E., Bar-On, D. and Awwad, E.** (2001) *Individualism and Collectivism in Two Conflicted Societies: Comparing Israeli-Jewish and Arab High School Students*. Youth and Culture. Vol. 33, No.1, pp. 3-30.
- Salameh, G.** (1986) *Hangover Time in the Gulf*. Middle East Report, March-April, pp. 40-43.
- Sanders, D.** (1990) *Behavioral Conventions and Archeology: Methods for the Analysis of Ancient Architecture*. In, Domestic Architecture and the Use of Space, Edited by, Kent, S., Cambridge University Press.
- Sanyal, B.** (1981) *Who Gets What, Where, Why and How: A Critical Look at the Housing Subsidies in Zambia*. Development and Change, Vol. 12, pp. 409-440
- Sapsford, R. and Jupp, V.** (Editors) (1998) *Data Collection and Analysis*. Sage Publications. London, Thousand Oaks, New Delhi.
- Sarantakos, S.** (1998) *Social Research*. McMillan, London.
- Saunders, P.** (1990) *A Nation of Home Owners*. Unwin Hyman, London.
- Saunders, P.** (1989) *The Meaning of Home in Contemporary English Culture*. Housing Studies, Vol. 4, No. 3, pp. 177-192.
- Scheff, T.** (1988) *Shame and Conformity: The Deference-Emotion System*. American Sociological Review. Vol. 53, June, pp. 395-406.
- Schofield, W.** (1998) *Survey Sampling*. Pp. 25-55, in Sapsford and Jupp (editors). Data Collection and Analysis, Sage Publications.



- Sedki, K.** (1994) *Low Income Housing in Abu Dhabi; the United Arab Emirates*. Unpublished Ph.D. Thesis, University of Strathclyde.
- Seek, N.** (1983) *Adjusting Housing Consumption: Improve or Move*. Urban Studies, Vol. 20, pp. 455-469.
- Sen, A.** (1984) *Resources, Values and Development*. Basil Blackwell Publisher limited.
- Serageldin, M., Doebele, W. and ElArabi, K.** (1979) *Land Tenure Systems and Development Controls in the Arab Countries of the Middle East*. Proceedings of Seminar at the Architectural Transformations in the Islamic World, Jakarta, Indonesia, 26-29 March, 1979.
- Shihab, M.** (1996) *Social and Economic Changes in the United Arab Emirates 1975-1995*. pp. 290-300. In Ghareeb, E. and Al-Abed, I. Rident Press.
- Silverman, D.** (2003) *Doing Qualitative Research: A Practical Handbook*. Sage Publications, London and New York.
- Sim, D.** (1993) *British Housing Design*. Longman.
- Simonson, I. and Nowlis, S.** (2000) *The Role of Explanations and Need for Uniqueness in Consumer Decision Making: Unconventional Choices Based on Reasons*. Journal of Consumer Research. Vol. 27, June, pp. 49-68.
- Sinai, I.** (2002) *The determinants of the Number of Rooms Occupied by Compound Dwellers in Kumasi, Ghana: Does Working at Home Mean More Rooms?* Applied Geography, Vol. 22, pp. 77-90.
- Sinai, I.** (2001) *Moving or Improving: Housing Adjustment Choice in Kumasi, Ghana*. Housing Studies, Vol. 16, No. 1, pp. 97-114.
- Sinai, T. and Waldfogel** (2001) *Do Low-Income Housing Subsidies Increase Housing Consumption?* The Wharton School, the University of Pennsylvania, USA.
- Singleton, R., Straits, B. and Straits, M.** (1993) *Approaches to Social Research*. Oxford University Press, New York, Oxford.
- Slater, D.** (1997) *Consumer Culture and Modernity*. Cambridge: Polity.
- Smith, L., Rosen, K. and Fallis, G.** (1988) *Recent Developments in Economics Models of Housing Markets*. Journal of Economic Literature, Vol. XXVI (March), pp. 29-64.
- Smelser, N. and Baltes, P. (editors)** (2001) *International Encyclopedia of the Social & Behavioral Sciences*. Elsevier, Amsterdam, New York and Oxford.
- Snyder, C.** (1992) *Product Scarcity by Need for Uniqueness Interaction: A Consumer Catch-22 Carousal*. Basic and Applied Social Psychology. Vol. 13, No. 1, pp. 9-24.



- Somerville, P. (1997) *The Social Construction of Home*. Journal of Architectural and Planning Research, Vol. 14, No. 3, pp. 226-241.
- South, S. and Crowder, K. (1998) *Avenues and Barriers to Residential Mobility Among Single Mothers*. Journal of Marriage and Family, Vol. 60, November, pp. 866-877.
- Spicker, P. (1987) *Concepts of Need in Housing Allocation*. Policy and Politics, Vol. 15, No. 1, pp. 17-27.
- Stafford, D. (1978) *The Economics of Housing Policy*. Croom Helm London.
- Sterner, E. (2000) *Life-Cycle Costing and its Use in the Swedish Building Sector*. Building Research & Information. Vol. 28, issue 5/6, pp. 387-393.
- Stork, J. (1985) *Prospects for the Gulf*. Middle East Report, No. 132, May, pp. 3-6.
- Strassmann, W. (2001) *Residential Mobility: Contrasting Approaches in Europe and the United States*. Housing Studies, Vol. 16, No. 1, pp. 7-20.
- Strassmann, W. (1991) *Housing Market Intervention and Residential Mobility: An International Comparison*. Urban Studies, Vol. 28, No. 5, pp. 759-771.
- Sullivan, B. and Chen, K. (1997) *Design for tenant Fit-out: A Critical Review of Public Housing Flat Design in Hong Kong*. Habitat International, Vol. 21, No. 3. pp. 291-303.
- Sullivan, O. (1994) *Processes of Housing Access: A Dynamic Approach to Housing Consumption*. Sociology, Vol. 28, No. 3, pp. 679-697.
- Sultan, Q. (2002) *Dubai from a Small Village to an International City: the Years of Building and Transformation*. Al-Bayan Publishing Establishment, Dubai. (in Arabic).
- Taryam, A. (1987) *The Establishment of the United Arab Emirates- 1950-1985*. Croom Helm, London, New York and Sydney.
- Teige, H. (2002) *The Minimum Dwelling*. MIT Press, Cambridge, Massachusetts and London.
- Telmesani, A. (1997) *Impact of Housing Construction Subsidies on Housing Consumption and Residential Location in Saudi Arabia*. Open House International. Vol. 22, No. 2, pp. 47-53.
- The Economist (US) (1992) *Comfort Blanket for the Gulf*. December, 5<sup>th</sup>, pp. 29-40.
- The Economist (US) (2003) *Should you Buy in Dubai? United Arab Emirates. (Dubai's Boom- Brief Article)*. Dec. 6, Vol. 369, Issue 8353, p. 42.
- The Royal Institute of British Architects (1983) *Homes for the Future: Standards for New Housing Development*.



- Tipple, G.** (1996) *Housing Extensions as Sustainable Development*. Habitat International, Vol. 20, No. 3, pp. 367-376.
- Tipple, G.** (2000) *Extending Themselves: user-initiated transformations of government-built housing in developing countries*. Liverpool University Press.
- Tipple, G., Korboe, D. and Garrod, G.** (1997) *Income and Wealth in House Ownership studies in Urban Ghana*. Housing Studies, Vol. 12, pp. 111-126.
- Tipple, G. and Korboe, D.** (1995) *Housing Policy in Ghana: Towards a Supply-Oriented Future*. Habitat International, Vol. 22, No. 3, pp. 245-257.
- Townsend, P.** (1979) *Poverty in the United Kingdom: A Survey of Household Resources and Standards of Living*. Allen Lane.
- Trade & Industry** (2000) *Local Consumer and Competition*. February, pp. 10-18.
- Triandis, H.** (1995) *Individualism & Collectivism*. Westview Press, Boulder and Oxford.
- Trucial States Council Development Office** (1968) *Population and Building Census*.
- Turner, J.** (1996) *Social Influence*. Open University Press, Milton Keynes.
- Turner, J.** (1972) *Housing Issues and the Standards Problem*. Ekistics, Vol. 196, March, pp. 152-158.
- Turner, J.** (1976) *Approaches to Government-Sponsored Housing*. Ekistics, 242, January, pp. 4-7.
- Tym, R.** (1984) *Finance and Affordability*. In *Low-income Housing in the Developing World*. Edited by, Payne, G., John Wiley, London.
- United Arab Emirates Central Bank** (2002) *Annual Economic & Financial Report*. Abu Dhabi.
- UNDP** (2004) *Human Development Report 2004*. United Nations, New York.
- UN-Habitat** (1993) *Human Settlement Statistical Database- HSDB. Stat.*, Habitat, Nairobi.
- Van der Vlist, N., Gorter, C., Nijkap, J. and Rietveld, L.** (2002) *Residential Mobility and Local Housing Market Differences*. Environment and Planning A. Vol. 34, July, pp. 1147-1164.
- Van Vliet, W. (editor)**, (1990) *International Handbook of Housing Policies and Practices*. Greenwood Press, New York and London.



**Varady, D.** (1983) *Determinants of Residential Mobility Decisions: the Role of Government Services in Relation to Other Factors*. Journal of American Planning Association, Vol. 49, No. 2, pp. 184-199.

**Varanda, F.** (1982) *Art of Building in Yemen*. The MIT Press, Cambridge, Massachusetts, London, England.

**Veblen, T.** (1899) *The Theory of the Leisure Class: An Economic Study of Institutions*. Macmillan, New York.

**Vigneron, F. and Johnson, L.** (1999) *A Review and a Conceptual Framework of Prestige-Seeking Consumer Behavior*. Academy of Marketing Science Review. Vol. No. 1, <http://www.amsreview.org/articles/vigneron01-1000.pdf>

**Voordt, T., Vrielink, D. and Wegen, H.** (1997) *Comparative Floor-plan Analysis in Programming and Architectural Design*. Design Studies, Vol. 18, No. 1, January, pp. 67-82.

**Walker, B.** (1981) *Welfare Economics and Urban Problems*. HUTCHISON, London.

**Walker, K.** (2004) *Teachers and Teacher World-Views*. International Education Journal. Vol. 5, No. 3, pp. 433-438.

**Waly, T.** (1992) *Private Skies: The Courtyard Pattern in the Architecture of the House in Bahrain*. Al Handasah Center Publications, Bahrain.

**Warde, A.** (1990) *Introduction to the Sociology of Consumption*. Sociology, Vol. 24, No. 1, pp. 1- 4.

**Ware, A. and Goodin, R.** (1990) *Needs and Welfare*. Sage Publications.

**Weale, A.** (1978) *Equality and Social Policy*. Routledge & Kegan, London.

**Wegener, B.** (1992) *Concepts and Measurement of Prestige*. Annual Review of Sociology, Vol. 18, pp. 253-280.

**Weinberg, D.** (1979) *The Determinants of Intra-Urban Household Mobility*. Regional Science and Urban Economics Vol. 9, pp. 219-246.

**Weiner, M.** (1982) *International Migration and Development: Indians in the Persian Gulf*. Population and Development Review, vol. 8, No. 1, pp. 1-36.

**Wentling, J.** (1995) *Housing by Life Style*. McGraw-Hill, Inc. New York, San Francisco.

**Whitehead, C. and Odling-Smee, J.** (1975) *Long-run Equilibrium in Urban Housing-A Note*. Urban Studies, Vol. 12, pp. 315-318.

**Wilk, R.** (2002) *Consumption, Human Needs, and Global Environmental Change*. Global Environmental Change, Vol. 12, pp. 5-13.



- Wilksa, T. (2003) *Mobile Phone Use as Part of Young People's Consumption Styles*. Journal of Consumer Policy, Vol. 26, pp. 441-463.
- Wilson, A. and Boehland, J. (2005) *Small is Beautiful: U.S. House Size, Resource Use, and the Environment*. Journal of Industrial Ecology. Vol. 9, No. 1-2, pp. 277-287.
- Wilson, R. (1995) *Economic Development in the Middle East*. Routledge, London and New York.
- Winckler, O. (2000) *Gulf Monarchies as Rentier States: The Nationalization Policies of the Labor Force*. Pp. 237-254, In Kostiner, J. Lynne Rienner Publishing, Boulder and London.
- Winnick, L. (1957) *American Housing and its Use: The Demand for Shelter Space*. John Wiley & Sons, Inc. New York.
- Winstanley, A., Thorns, D. and Perkins, H. (2002) *Moving House, Creating Home: Exploring Residential Mobility*. Housing Studies, Vol. 17, No. 6, pp. 813-832.
- Wong, G. (2002) *A Conceptual Model of the Household's Housing Decision-Making Process: The Economic Perspective*. Review of Urban and Regional Development Studies, Vol. 14, No. 3, November, pp. 217-233.
- Worcester, R. (1996) *Political Polling: 95% Expertise and 5% Luck*. Journal of Royal Statistics Society A. Vol. 159, Part 1, pp. 5-20.
- World Bank (1993) *Housing, Enabling Markets to Work, with Technical Supplements*. A World Bank Policy Paper, Washington D.C.
- Wosinska, W., Cialdini, R., Barrett, D. and Reykowski, J. (2001) *The Practice of Social Influence in Multiple Culture*. Lawrence Berlbaum Associates, Publisher, Mahwah, New Jersey and London.
- Yahya, S., Agevi, E., Lowe, L., Mugova, A. Musandu-Nyamayaro, O. and Schilderman, T. (2001) *Double Standards, Single Purpose: Reforming Housing Regulations and Reduce Poverty*. ITDG Publishing, London.
- Yetrehus, S. (2001) *Interpretation of Housing Needs: A Critical Discussion*. Housing, Theory and Society: 17: 166-174.
- You, Y. (1997) *Shame and Guilt Mechanisms in East Asian Culture*. The Journal of Pastoral Care . Vol. 51, No. 1, pp. 57- 64.
- Zahlan, R. (1998) *The Making of the Modern Gulf States: Kuwait, Bahrain, Qatar, the United Arab Emirates and Oman*. Ithaca Press, Lebanon.
- Zahlan, R. (1978) *The Origins of the United Arab Emirates: A Political and Social History of the Trucial States*. Macmillan.



**Zetter, R.** (1993) *Land Issues in Low-income Housing*. In Low-income Housing in Developing World, Edited by Payne, G., John Wiley, London.

**Zukin, S.** (1998) *Urban Lifestyle: Diversity and Standardization in Spaces Consumption*. Urban Studies, Vol. 35, Nos. 5-6, pp. 825-839.



# APPENDICES



## **Appendix 1 The Owner-Occupant Questionnaire**

### **Part One: Owner and Household Characteristics:**

- 1- Gender of head of household:  
☐ Male  
☐ Female
- 2- Age of head of household: ..... years
- 3- Marital status of head of household:  
☐ Married  
☐ Single  
☐ Widowed  
☐ Divorced  
☐ Married with more than one wife
- 4- Number of households living in the dwelling unit: ..... Household(s)
- 5- Number of person living in the dwelling unit, excluding, servants: ..... Person(s)
- 6- Number of children living in the same dwelling: ..... Children
- 7- Do any other relatives, other than spouse and children live in the dwelling:  
☐ Yes, how many ....., relationship.....  
☐ No
- 8- Number of servant/ house-maids living in the dwelling: .....
- 9- Length of stay (in years) in the current dwelling unit: ..... year(s)
- 10- Educational attainment (level completed) of head of household:  
☐ University and above  
☐ Secondary  
☐ Intermediate  
☐ Primary  
☐ Read and Write
- 11- Current employment of head of household:  
☐ Civil servant  
☐ Private sector employee  
☐ Self-employed/ investor  
☐ Unemployed  
☐ Retired
- 12- Does anyone else in the household have permanent paid employment or income, e.g. spouse, children:  
☐ Yes, who .....  
☐ No



13- In what sort of accommodation did you live prior to moving to your current dwelling unit?

- ☐ In my own house
- ☐ In a rented accommodation
- ☐ With my parents or other relatives
- ☐ In employer provided accommodation

14- Which of the following income categories represent your total monthly income available for your household use, inclusive of salaries and other non-salary permanent incomes?

- ☐ 5,000-7,499
- ☐ 7,500-9,999
- ☐ 10,000-12,499
- ☐ 12,500-14,999
- ☐ 15,000-17,499
- ☐ 17,500-19,999
- ☐ 20,000-22,499
- ☐ 22,500-25,000

## **Part Two: Dwelling Unit Characteristics:**

15- What is the type of your current dwelling unit?

- ☐ Villa
- ☐ Courtyard, Arabic house
- ☐ Other, please specify.....

16- What is the total size (area) of your current residential plot? ..... square metre

17- What is the total built-up area (floor-space) of your current dwelling?.....square metre

18- How many floors (storeys) is your current dwelling built of?

- ☐ One
- ☐ Two
- ☐ Other, please specify .....

19- How many separate service/ guest block(s) (i.e., mulhaq) do you have in your current dwelling?

- ☐ One
- ☐ Two
- ☐ Three or more



20- Please indicate the number of rooms you have in your current dwelling for each of the following types of rooms:

Types of Rooms	Number
Master bedrooms	
Bedrooms	
Guest bedrooms	
Living-rooms	
Dining-rooms	
Kitchens	
Pantries	
Bathrooms	
Toilets	
Men’s Guest reception room (majlis)	
Women’s Guest reception room (majlis)	
Servant/ maid’s room	
Utilities/ Laundry rooms	
General Storage rooms	
Dressing rooms	
Office/ Library/ Reading/ Sports rooms	
Children play-room	
Other, please specify.....	

21- Is this the first dwelling you ever owned?  
[ ] Yes, (proceed to Q. 22)  
[ ] No,

22- If you had owned a dwelling previously, what did you do with it?  
[ ] I sold it  
[ ] I rented it  
[ ] Other, please specify.....

23- How much did the construction of your current dwelling cost? ..... Dirhams.

24- How did you finance the construction of your current dwelling? please specify amount for each source.

Financing Source	Amount In AED
Private Housing Finance Scheme interest-free loan	
Sheikh Zayed Housing Programme interest-free loan	
Commercial bank loan (personal loan)	
Personal savings	
Assistance and help from relatives	
Other, please specify.....	



25- If you have used any loan(s) to pay for the construction of your current dwelling, how much monthly in Dirhams do you have to pay for the loan(s)? ..... Dirhams

**Part Three: Household Preferences and Dwelling Unit Utilization**

26- If you have a designated guest-reception room (majlis), how many times during the last thirty days did your household receive guests in the guest reception room?

- ☐ None (proceed to question 29)
- ☐ One
- ☐ Two
- ☐ Three
- ☐ Four
- ☐ Five or more

27- On average how many guest(s) did you receive in each visit?

- ☐ One
- ☐ Two
- ☐ Three
- ☐ Four
- ☐ Five
- ☐ Six
- ☐ More than six

28- On average, how long (in hours) did each visit last?

- ☐ One hour
- ☐ Two hours
- ☐ Three hours
- ☐ Four hours
- ☐ Six hours
- ☐ More than six hours

29- Do you use your guest reception room for any other activities, other than receiving guests?

- ☐ Yes, please specify.....
- ☐ No

30- During the last seven days, in which room(s) did your household members have their following daily meals?

Type of Meal	Room Used
Breakfast	
Lunch	
Dinner	

31- How do you perceive the overall cost of living in your current dwelling unit? (show cards with description of each of the following answers).

- ☐ Very expensive
- ☐ Expensive
- ☐ Inexpensive



32- How many full-time house-maids/ servants do you currently hire to look after your dwelling and household services?  
[ ] None, (*proceed to question 35*)  
[ ] One (*proceed to question 34*)  
[ ] Two  
[ ] More than two

33- If you have hired two or more housemaids, can you tell me why you have done so?  
.....  
.....  
.....

34- How much (inclusive) approximately do you spend on each house-maid you have hired every year? ..... Dirhams.

35- How much was the price of your last months' electricity bill? .....  
Dirhams

36- Have you ever considered moving out of your current dwelling?  
[ ] Yes  
[ ] No, (*proceed to question 38*)

37- Could you tell what were your reason(s) for considering to move out of your current dwelling? Please select appropriate answers(s).  
[ ] I need a smaller house  
[ ] I need a larger house  
[ ] I don't like the design of my house  
[ ] I don't like my neighbourhood  
[ ] Others, please specify, .....

38-What size house would have you built if there was no interest-free housing loan from the government compared to the one built with the loan?  
[ ] I would have built a smaller size house  
[ ] I would have still built a similar size house  
[ ] I would have not built a house at all  
[ ] I am not sure what would I have done

39- If time goes back, would you accept if the PHFS or SZHP designed and built homes and sold one to you against your interest-free loan, instead of you having to go through design and construction yourself?  
[ ] No  
[ ] Yes  
[ ] Yes, but with certain conditions (*proceed to the next question*)

40- Can you please tell me under what conditions would have you accepted a ready-built dwelling?  
.....  
.....  
.....



## Appendix 2: The Owner-to-be Questionnaire

---

1- Gender of head of household:

- ☐ Male
- ☐ Female

2- Age of head of household: ..... years

3- Marital status of head of household:

- ☐ Married
- ☐ Single
- ☐ Widowed
- ☐ Divorced
- ☐ Married with more than one wife

4- Number of person will be living in the dwelling unit, excluding, servants: .....

Person(s)

5- Educational attainment (level completed) of head of household:

- ☐ University and above
- ☐ Secondary
- ☐ Intermediate
- ☐ Primary
- ☐ Read and Write

6- Current employment of head of household:

- ☐ Civil servant
- ☐ Private sector employee
- ☐ Self-employed/ investor
- ☐ Unemployed
- ☐ Retired

7- Does anyone else in the household have a permanent paid employment or income, e.g. spouse, children:

- ☐ Yes, who .....
- ☐ No

8- In what sort of accommodation did you live prior to moving to your current dwelling unit?

- ☐ In my own house
- ☐ In a rented accommodation
- ☐ With my parents or other relatives
- ☐ In employer provided accommodation

9- Which of the following income categories represent your total monthly income available for your household use, inclusive of salaries and other non-salary permanent incomes?

- ☐ 5,000-7,499
- ☐ 7,500-9,999



- [ ] 10,000-12,499
- [ ] 12,500-14,999
- [ ] 15,000-17,499
- [ ] 17,500-19,999
- [ ] 20,000-22,499
- [ ] 22,500-25,000

10- What is the type of your future dwelling unit?

- [ ] Villa
- [ ] Courtyard, Arabic house
- [ ] Other, please specify.....

11- What is the total built-up area (floor-space) of your future dwelling?.....square metre

12- How many floors (storeys) will your future dwelling have?

- [ ] One
- [ ] Two
- [ ] Other, please specify .....

13- How many separate service/ guest block(s) (i.e., mulhaq) will your future dwelling have?

- [ ] One
- [ ] Two
- [ ] Three or more

14- Please indicate the number of rooms you are going to have in your future dwelling for each of the following types of rooms:

Types of Rooms	Number
Master bedrooms	
Bedrooms	
Guest bedrooms	
Living-rooms	
Dining-rooms	
Kitchens	
Pantries	
Bathrooms	
Toilets	
Men’s Guest reception room (majlis)	
Women’s Guest reception room (majlis)	
Servant/ maid’s room	
Utilities/ Laundry rooms	
General Storage rooms	
Dressing rooms	
Office/ Library/ Reading/ Sports rooms	
Children play-room	
Other, please specify.....	



15- How much is the total cost of building your future dwelling? ..... Dirhams.

16- How are you financing the construction of your future dwelling? please specify amount for each source.

Financing Source	Amount In AED
Private Housing Finance Scheme interest-free loan	
Sheikh Zayed Housing Programme interest-free loan	
Commercial bank loan	
Personal savings	
Assistance and help from relatives	
Other, please specify.....	

17- Before you started designing your home, did you decide on a budget for construction?

- ☐ I had set a fixed budget
- ☐ I had set a tentative budget
- ☐ I had no idea, (*proceed to question 19*)

18- Did the actual cost of construction exceed your anticipated initial budget?

- ☐ Yes
- ☐ No

19- What size house would have you built if there was no interest-free housing loan from the government compared to the one built with the loan?

- ☐ I would have built a smaller size house
- ☐ I would have still built a similar size house
- ☐ I would have not built a house at all
- ☐ I am not sure what would I have done

20- What size house would have you built if you were granted an interest-free housing loan of only AED 250,000 from the government compared to the one built with the full loan of AED 500,000?

- ☐ I would have built a smaller size house
- ☐ I would have still built a similar size house
- ☐ I would have not built a house at all
- ☐ I am not sure what would I have done

21- Is this the first time you were ever involved in a home design process?

- ☐ Yes
- ☐ No

22- When you were designing you future dwelling, did you consult anyone else other than your architect on your home design matters?

- ☐ Yes, please specify who.....
- ☐ No



- 23- While designing your future home, did you ever visit the area where your plot is located?
- ☐ Yes
- ☐ No, (*proceed to question 25*)
- 24- If you have visited the area where your plot is located, could you tell me what were the purpose(s) of your visit(s)?
- ☐ I wanted to become familiar with location
- ☐ I wanted to observe the sizes of other dwelling in the area
- ☐ I wanted to observe design styles of other homes
- ☐ Other
- 25- Is the size of your dwelling important for exposing your social status and prestige?
- ☐ Important
- ☐ Neither
- ☐ Unimportant
- 26- Is it important that the size of your house should be as big as those of any of your relatives, friends or neighbours?
- ☐ Important
- ☐ Neither, (*Proceed to question 28*)
- ☐ Unimportant, (*Proceed to question 28*)
- 27- Do you mind telling me why should you think it is important to have a house that is as big as those of your relatives, friends or nieghbours?
- .....
- .....
- .....
- .....
- 28- Do you prefer building your future dwelling in stages or all at once?
- ☐ At once
- ☐ In stages, (*proceed to question 30*)
- 29- If you prefer to build at once, could you please tell me why?
- .....
- .....
- .....
- 30- While you were designing your future house, have you ever thought about or considered any of the following future housing cost?
- ☐ Cost of house maintenance, replacements and repairs
- ☐ Cost of house furnishing
- ☐ Cost of housekeeping (hiring housemaids)
- ☐ Cost of electricity bills



31- If you have considered any of these costs, could you tell me if this had any effect on the size of dwelling you finally decided to build?

Type of Cost	Yes	No
Cost of house maintenance, replacements and repairs		
Cost of house furnishing		
Cost of housekeeping (hiring housemaids)		
Cost of electricity bills		



Appendix 3: Semi-structured Interview Guide  
(Private Architectural/ Engineering Office)

(1) Personal Data:

Position: .....  
Age: .....  
Nationality: .....  
Years of Architectural Design Experience: .....  
Years of Experience In The UAE: .....  
Approx. Number of Private Dwelling Units Designed: .....  
Bases of Arch./Designer Wage Payment: Fixed salary .....Percentage Commissions.....  
Percentage Of Consumer Charges: .....%

(2) Discussion Topics/ Issues/ Topics:

1. What are the responsibilities of arch./ designer and consultants office?  
.....
2. Could you describe single-household dwelling unit design approach and process?  
.....
3. What are the bases upon which clients decide on the design of their dwelling units, i.e., what and who's influences?  
.....
4. Can you tell me about your clients' experiences with home design?  
.....
5. In your opinion what are the most important aspects of dwelling unit design to clients?  
.....
6. Do you discuss with your clients issues related to the after construction housing cost, such as cost of furnishing, housekeeping, electricity bills, maintenance ect.?  
.....
7. In your opinion what are the factors that influence dwelling unit size?  
.....
8. What do you think about Municipality's standards/ guidelines (particularly with reference to room size standards)?  
.....
9. Are there any awareness programs with regards to home design and construction for clients? Should there be?  
.....
10. How would you think dwelling unit spaces are utilised after households move in?  
.....
11. What architectural and design philosophies you most associate yourself with? And how would that affect your contribution in single household design?  
.....



Appendix 4: Semi-structured Interview Guide

(Government officials/ Dubai Municipality- Planning Department)

(1) *Personal Data:*

Position: .....

Organization:.....

Responsibilities:.....

.....

(2) *Discussion Topics/ Issues/ Topics:*

1. What is the current government housing policy for nationals in Dubai Emirate?
- .....
2. Who decides what policies to adopt for housing and related aspects, such as, land allocation, planning regulations, building codes etc.?
- .....
3. On what basis are housing policies formulated and then adopted?
- .....
4. Does the Municipality have a housing plan or strategy that deals with short/ medium and long term housing needs?
- .....
5. Does the Municipality have a particular policy, standards or targets with regard to housing size or housing space consumption?
- .....
6. Does the government monitor the national housing sector and, if yes, for what purposes?
- .....
7. What are the most important issues and problems in the nationals housing sector?
- .....
8. How does the government plan to deal with these issues/ problems?
- .....
9. Does the government consider the housing space consumption as an important issue, has it been addressed and why?
- .....
10. Do the different government bodies involved in various aspect of nationals' housing sector (land allocation, building and planning reg. and standards, housing finance and others) co-ordinate, how is that done and has it been successful?
- .....
11. Does the government play any role in educating heads of households who are about to built their dwelling units about housing design, construction, management and maintenance and why?
- .....



**Appendix 5: Semi-structured Interview Guide  
(The Private Housing Finance Scheme 'PHFS') & The Sheikh  
Zayed Housing Programme 'SZHP')**

*(1) Personal Data:*

Position: .....  
Organisation: .....  
Responsibilities: .....  
.....

*(2) Discussion Topics/ Issues/ Topics:*

1. What are the responsibilities and roles of this organisation?  
.....
2. What is the rationale for setting up the interest-free loan programme by the government?  
.....
3. Who sets and decides on loan programme policies and procedures?  
.....
4. Who is eligible for loan application?  
.....
5. Who decides on who receives the interest-free housing loan and what criteria are used for that?  
.....
6. What are the loan conditions and regulations?  
.....
7. How much is the maximum upper limit of the loan and on what basis is this set? Have they been adjusted since its inception and why is it so?  
.....
8. Does your institution have any other housing financing schemes other than the interest-free loan? How successful have those been if any?  
.....
9. What role the bank plays in educating the loan beneficiaries on house design, construction, management and maintenance? Do you think that's the role of your institution and why?  
.....
10. Does your institution co-ordinate with other organisations involved in the nationals' housing sector, what is the nature of it and how successful has it been?  
.....
11. How does your institution perceive the current trends of housing unit size (space consumption) among those been awarded the loans? Do you have any observation/ opinion or targets with regards to those aspects and why?  
.....
12. Would your institution be interested in considering other housing provision methods, such as building units and selling them to loan beneficiaries?  
.....



**Appendix 6: Major historical developments in the housing policy and institutions in Dubai Emirate (1958-2004)**

<b>Year</b>	<b>Main Housing Policy Event</b>
1958	Establishment of Dubai Municipal Council
1960	Establishment of Lands' Department
1961	Adoption of Dubai's first long-range town plan
1968	Adoption of the first building code
1969	Oil export commences in Dubai Emirate
1970	Adoption of the revised and comprehensive building code
1970	Government starts to allocate free of charge (232 sq. m.) planned and serviced residential plots to all national households
1972	Government starts to build and allocate free of charge core houses to low-income national households and provide free grants to maintain existing units
1980	Establishment of the first Public Housing Department
1984	Government decides to increase the size of the free housing plot by three times to 10,000 sq. ft. (929 sq. m.)
1985	Government instigates a free housing grant programme of AED 200,000 for low and middle income national households
1989	Government decides to increase value of free housing grant to AED 250,000
1989	Government decides to increase standard size of the free middle-income residential plot to 15,000 sq. ft. (1393 sq. m.)
1990	Government decides to abolish the free housing financial grants
1993	Government establishes the Private Housing Finance Scheme (PHFS) to provide middle-income households with interest-free housing loans of AED 500,000 each payable in 25 years
1999	UAE federal government establishes the Sheikh Zayed Housing Programme (SZHP) which provides interest-free housing loans of AED 500,000 to middle-income national households payable in 25 years
2004	Government decides to increase the value of the PHFS interest-free loan to AED 750,000

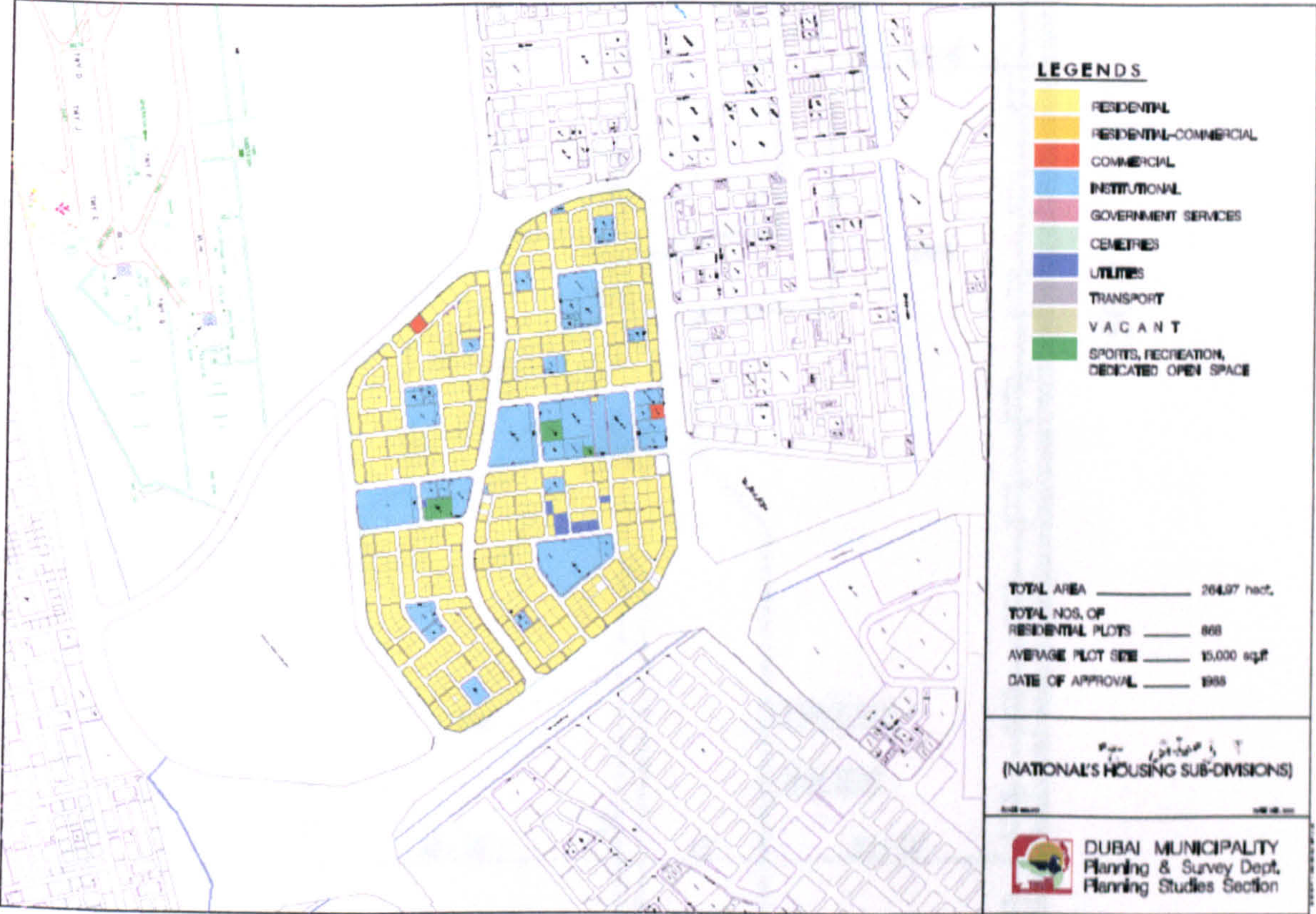
---

*Source: Author*



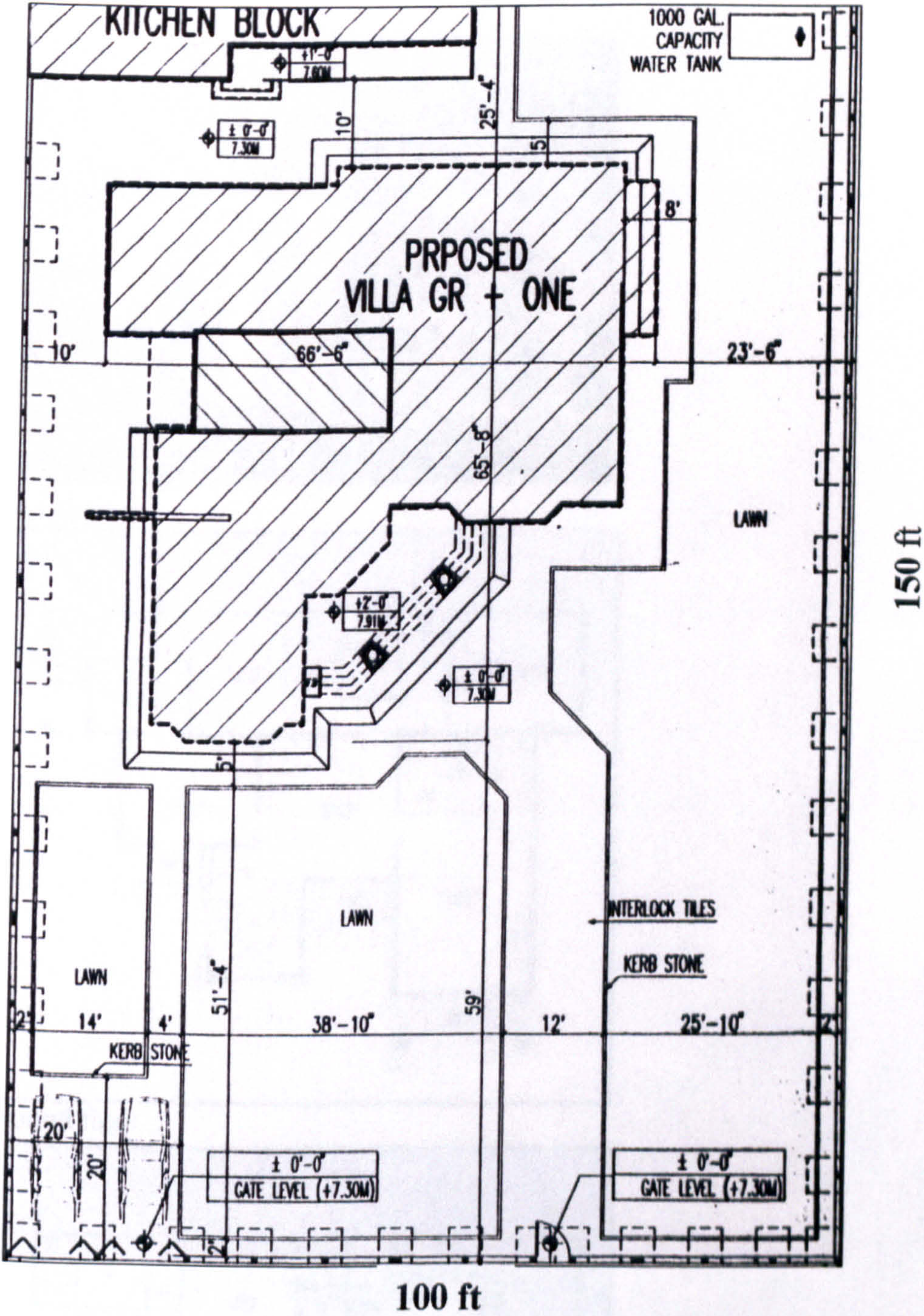
**Appendix 7: Examples of Contemporary Middle-Class Residential Area Plans, Housing Floor Plans, Elevations and photos of interior spaces**

*Al-Tawar Area, an example of a middle-class contemporary housing*





A setting plan of a contemporary dwelling with its service block



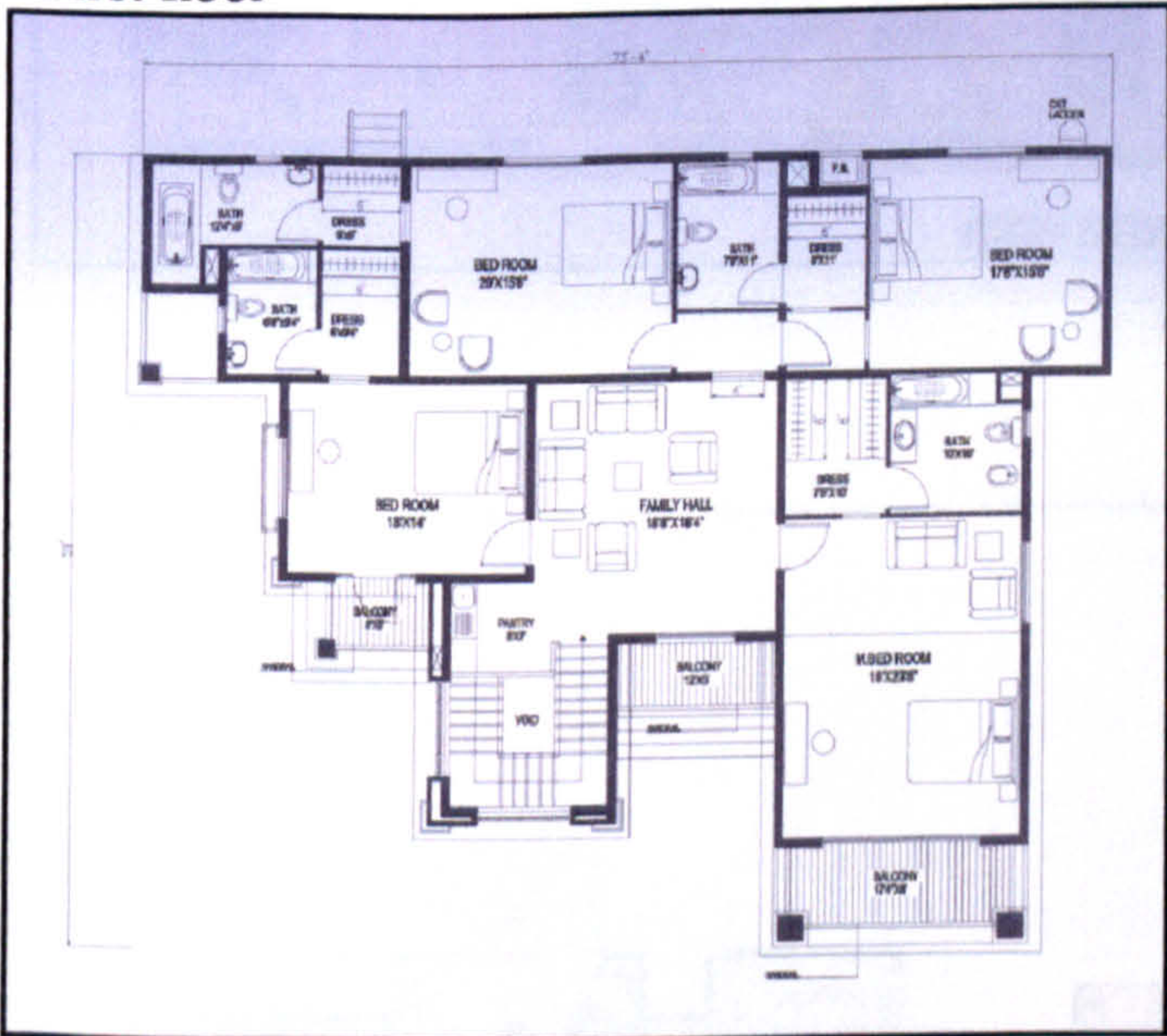


front elevations and floor plans of middle-class contemporary dwellings

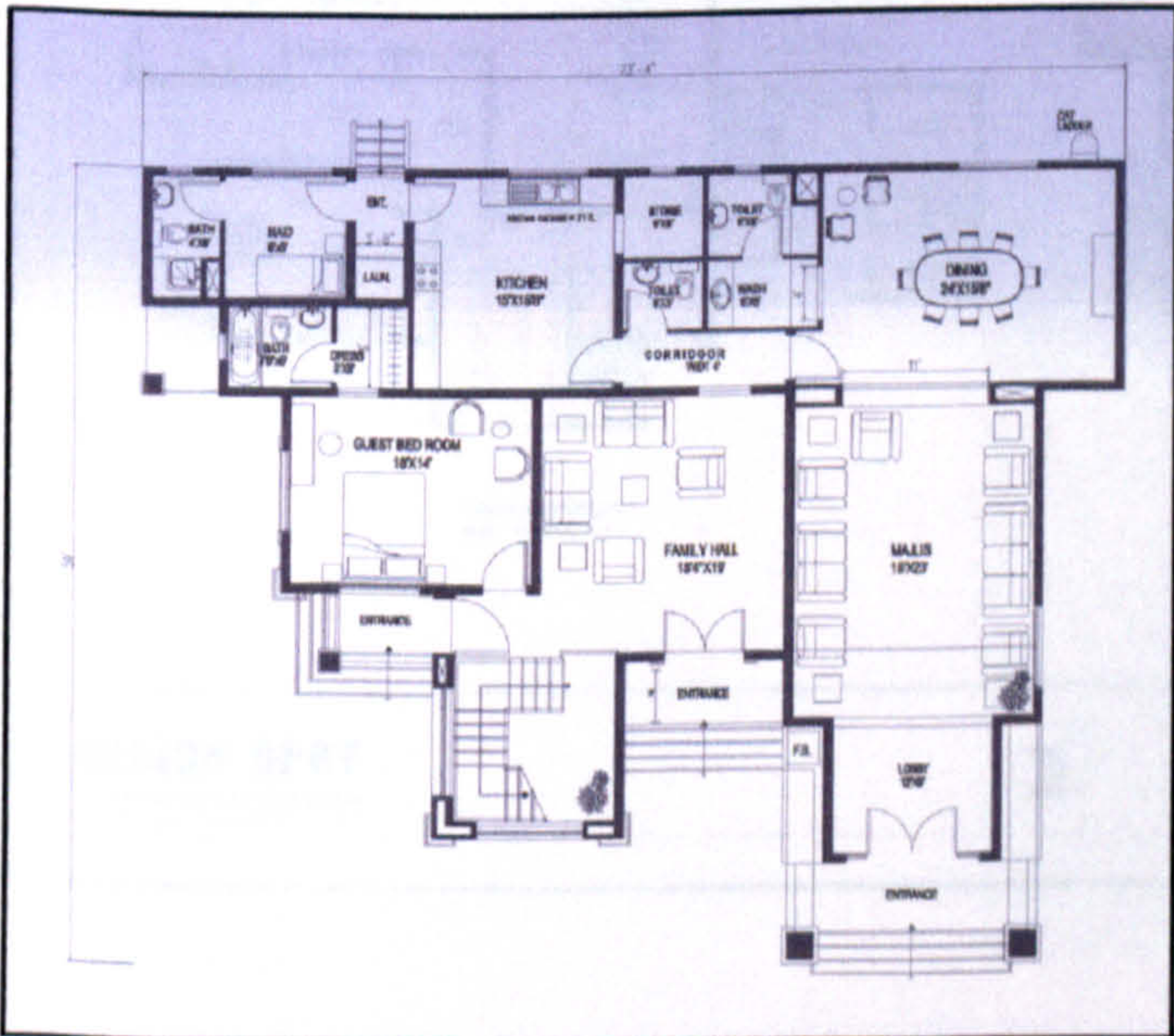
Front elevation



First floor



Ground floor

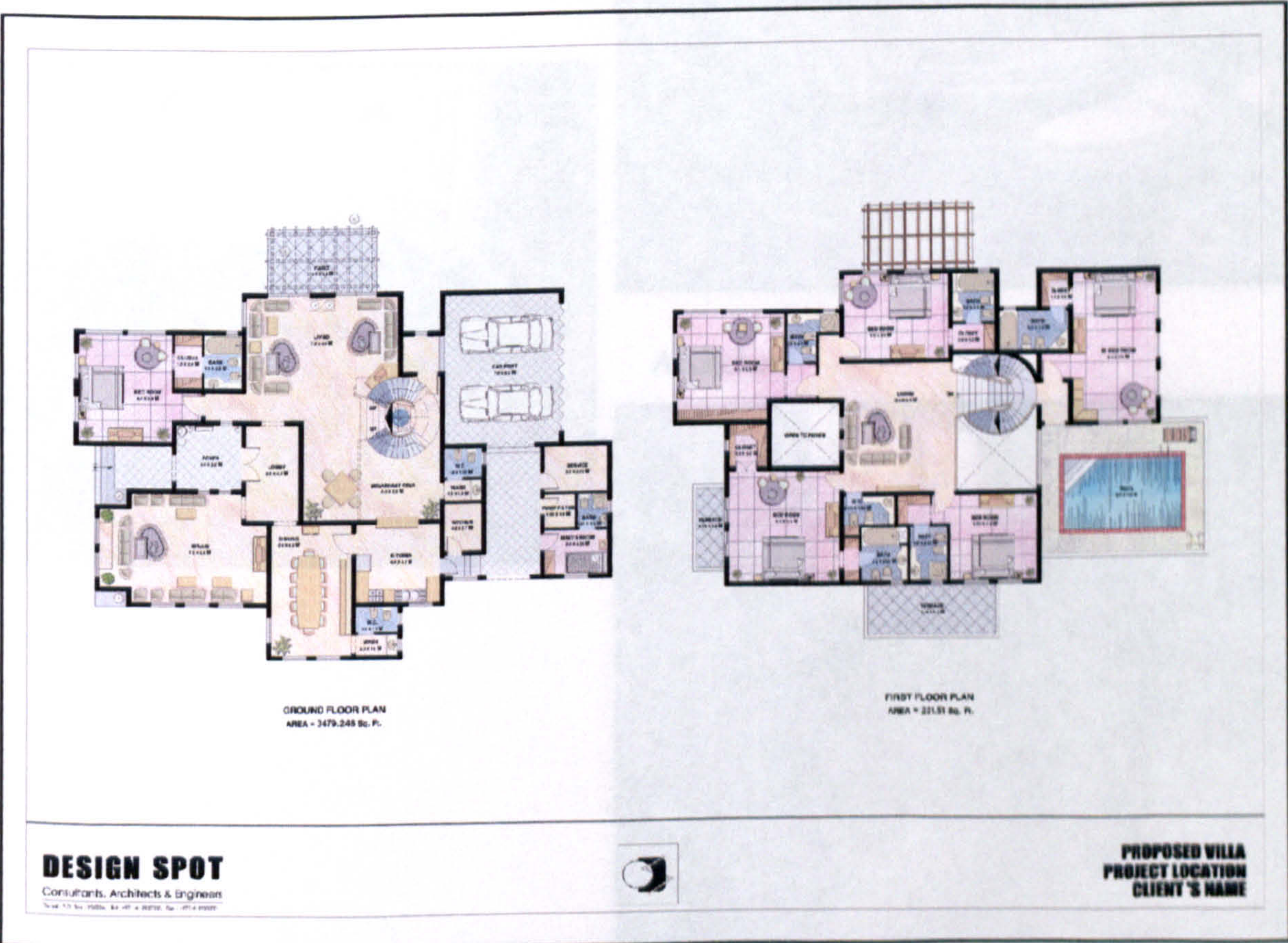




Front elevation



Floor plan





*Photos of interior spaces of middle-class dwellings*

A bedroom



A majlis (guest reception room)



A bathroom



A living room



A kitchen

